

ART SIMPLIFIED



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ART



SIMPLIFIED

A BOOK OF PRACTICAL ART
FOR ADVERTISERS, COMMERCIAL
ARTISTS, TEACHERS AND
STUDENTS

by

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With Illustrations by the Authors
and Students



THE PRANG COMPANY

Chicago

New York

San Francisco

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SECOND EDITION

THE FOREWORD

IN this age of industrial activity, it has been found that the success of manufactured products depends largely upon Art and Advertising. Without these no progressive industry can hope to continue.

Whereas in the past utility only was demanded of the industries, today the American public demands beauty combined with utility. With this development has come the art of advertising, the announcing of the products of industry in an interesting, appealing form. This has developed into an immense and profitable industry, calling into use the artist and designer and the introduction of the subject in our school curriculums. There has also developed a strong demand for practical knowledge of industrial and advertising Art subjects in up-to-date industries of today.

The following pages present the study of those principles based upon years of active experience by the authors. Urgent requests from students, teachers and professional workers have given an impetus to the second edition of this book.

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ART SIMPLIFIED

Chapter I

PREPARATION AND MATERIALS

THE common idea that artists are born and not made is true in one sense and yet not true. Some people who are endowed with more apparent Art ability than others never achieve any results with their talent because they lack other necessary qualities to go with this.

The statistics showing that a large percentage of those who attend Art Schools fall by the wayside and finally drop this line of endeavor, prove this statement. We believe with Edison, that true Genius is one per cent Inspiration and ninety-nine per cent Perspiration.

An artist's equipment fortunately is not an expensive one, and yet, because of the recent prodigious development in the Advertising field, good Commercial Designers are highly paid for their work. Inasmuch then, as an artist's capital consists mainly of his own efforts, it is extremely important that he exercise care and good judgment in the selection of materials, location and instruction.

Location: In selecting a place to work always remember that a north light is best, as it does not tire the eyes, and is not subject to such decided variation through the day as an eastern or western exposure.

Desk: If possible select a desk which has at least one large drawer in it, possibly divided into two sections. The desk top should be large enough to permit of free action without knocking over ink bottles, etc. A common kitchen table can be adapted to this use.

Drawing Board: A drawing board which is built of wood which will not warp can be obtained at any art store. A light and easily handled style is that made of 3-ply Basswood. The board for the average use should never be smaller than 18x24 inches.

Pencils and Erasers: About three kinds of pencils are required. A medium lead such as Dixon's HB or Faber's No. 2, a soft large lead, as Dixon's No. 312, and a Hard No. H pencil. The medium lead is used for general outlining of drawings—the soft one for sketch purposes, and the hard one for mechanical drawing or fine details.

The best eraser is one of a soft texture which does not injure the paper, such as Hardmuth's H or Faber's J. F. eraser, both of which are good.

Pens and Ink: For pen and ink work a pen known as Gillot's No. 170 and No. 393 are most used in general work. For finer lines No. 290 is used, and for lettering purposes an assorted box of Spoonbill pens or Blancy Poure Pens, listed in the back of this book is invaluable.

The best ink to use is Prang's or Higgins' Waterproof Black.

Papers: Papers vary according to the style of drawing. A list of these and their specific uses will be found in the Appendix. For general purposes 3-ply Wedding Bristol Board is good for both pen and ink and wash work. Translucent Bristol Board is good for smooth pen and ink lines and 2-ply Strathmore Water Color Paper for wash drawings.

T-Square and Triangle: A T-Square not shorter than 24 inches should be obtained at any art store, together with a celluloid Triangle called the 45-90°. These will help you obtain drawings which are square and true when finished.

Thumb Tacks: A small box of steel Thumbtacks are used in fastening the drawings to the board when ruling lines, etc.

Compass Sets: Compass Sets are of all prices. A good one can be obtained for about \$1.25. The compass set is necessary in obtaining accurately drawn circles, ruled borders, etc., and saves considerable time in Commercial work. A diagram showing one and the use of its various parts is given in the last chapter.

Water Colors: An inexpensive box of water colors is put out by The Prang Company. Avoid buying sets with odd combinations of colors. Two or three porcelain dishes about the size of butter chips and a glass for holding water are also used in water color work. In the Appendix is a suggested list of practical colors.

Brushes: The brushes known as Red Sable can be obtained at art stores. The sizes most convenient are No. 3, 6 and 8. No. 3 is used

for small details, No. 6 for average work. No. 8 for large flat washes of color. Always wash your brushes thoroughly in water after using.

Chinese White: This white is used for touching out errors in pen and ink work, or for mixing with water colors to make them opaque. There are various makes. Semples, Dicks and Masters. After a little use you can select the one best adapted to your own use. Many Commercial Artists have best success with a make known as Process White, sold by the Prang Company.

These notes in a general way will suggest the materials needed and their use. The expense involved is slight when compared to the possibilities which may be obtained with the equipment.

Remember if you take good care of such materials as the T-Square, Compass Set, and Drawing Boards they last almost indefinitely. Make it a plan to keep your equipment in a definite place and always return your materials to their places. This will obviate the annoyance of hunting articles while working.

Scrap Library: This name has been applied to clippings of good art work by artists for help or suggestions in their productions. While it is not advisable to depend on copying the work of others, it is of extreme value to have on hand examples of styles and techniques, or of famous buildings and portraits for reference in producing orders. At such a time as you should wish, for instances, to draw an Indian on horseback or an aeroplane, it is a great time saver to have some clippings showing horses in action, or an aviation meet.

A good plan is to have a set of manila envelopes 10x12 inches in size, and label them on the corner with various names, such as: Figures, Landscapes, Marines, etc.

Portfolio: A cloth bound cardboard portfolio about 30x25 inches in size is very useful for keeping finished drawings or paper. It is always better if possible to keep it where the paper will lie flat rather than on edge, as the latter way has a tendency to warp the paper.

Brush Holder: A simple vase about 6 inches high can be used for keeping pencils, penholders or brushes in a position where they will be easy to reach and safe from injury at the points. Such a vase should have a good wide base so as not to tip over easily. A small cardboard

box is good for holding pen points that are being used. It is a good plan in purchasing materials to try the various grades of papers and inks until you find those most adapted to your purpose.

The materials above are all that is necessary to produce the best of results. These combined with good light and enthusiastic effort will bring the kind of work that counts. Remember to study carefully each suggestion as it is printed and then to apply it in some way, as constant practice is the surest and therefore the quickest way to succeed.

Chapter II

BEGINNING THE DRAWING

CORRECT drawing is the foundation of the fine arts and the painter, designer, architect or sculptor acknowledges this fact by a thorough preliminary training in draughtsmanship. It is through drawings that we are enabled to know much of the history of nations of the past, and it is interesting to note that aboriginal tribes, oriental and other nations are recording a good part of their history in this way at the present time.

Principles: The underlying principles of drawing can be easily studied and anyone can draw with much greater facility, when these principles are understood. While some may have a natural talent and may produce greater final results, they cannot ignore certain underlying principles of drawing without being handicapped in their efforts.

Materials may be few and simple, but well adapted to the medium of expression. For pencil work, the pencil should be soft and of a large lead. A finer pointed pencil can also be used. The paper should be soft enough and of a rough texture and the eraser should also be soft enough to permit of erasures without injuring the paper surface. Completed drawings may be permanently "fixed" by spraying fixatif over the surface.

Location of Drawings: Starting the drawing correctly is very important. To know how and where to place the subject upon the paper is the first problem. An interesting scene or subject becomes flat and unattractive if drawn too large on the paper or if it is placed too low or too high, or so close to the edge of the paper as to leave no margin for possible needed additions. All drawings should be made so as to leave an ample margin on all sides, as it is easy enough to cut down the paper, while the necessity of adding a needed inch or two is not so easily remedied. If possible the article you are sketching should be placed so that the lighting on it will be definite and simple. Later, you can use the more complex effects. A quick way to obtain a definite

idea as to the general shape and character of an object is by looking at it through half closed eyes. This will help eliminate all superfluous detail.

Observation should precede the drawing of any object or subject. Note carefully whether the object is one of contrasting forms which may be expressed as masses of various shapes. Observe what relation these forms and shapes have to one another as regards size and location.

Securing Proportions: Proportions of the objects to be drawn are usually expressed with an outline. It is possible, also, to express all the characteristics of an object excepting color by the use of an outline drawing. A beginner should draw in outline first as proportions can best be studied in this way, without the confusion of attempting to represent light and shade or color. Correct proportions in the drawings are of vital importance for if a drawing is faulty in its proportions, no amount of careful finishing can correct the mistake.

Outlining the shape of a drawing is purely a method of interpretation, as, strictly speaking, there is no outline in nature. That which we commonly call an outline is the dividing line between two shades—the ending of one shade and the beginning of another. Notice how the fields, hills, woods, etc., or one object placed partly in front of another are merely patches of shade and color that end more or less abruptly.

“Blocking” Drawings: “Blocking in” consists of sketching in the general shape of an object with straight lines. This should be done lightly with a soft pencil. In this way we can make several estimates before drawing the final line, and prevent the quite common fault of carefully finishing one part of a drawing before the other parts are studied out. It enables us to plan the form as a whole, and to place this form in the best position on the paper before spending any time on the details. If this “blocked out” form is correct the careful drawing of parts and additional details will be much simplified.

Checking up: “Checking up” the blocked in drawing should precede the finishing of the details. Compare the parts of the drawing with those in the object. Compare the angles formed where the lines meet each other both on the object and those formed by the object against the background. Look at the object, holding a pencil or ruler at arm’s length, using it as a plumb line. See if certain points of your drawing are in the correct position under each other.

Hold the pencil loosely and work for the correct form in a series of light lines. Do not erase incorrect lines, but redraw without erasing, as the error then being visible, will not be repeated. In the finished drawing all lines except the correct ones can be erased.

Avoid the tendency to localize. By this is meant the common failing of becoming so interested in one part of an object that you lose the appearance of the subject as a whole. At the beginning work for simple effects. Some of our best illustrations, posters, and advertisements in modern work are those done in a strong, simple manner.

Simple Effects: A few lines well drawn in the right way are of more value than many fussy or weak strokes which lack character and tell nothing.

It is a good plan to keep an extra sheet of paper under the one on which you are sketching. This prevents the grain of the wood in the drawing board affecting the texture of your pencil lines.

Instruments: Never use a T-Square, triangle or ruler in drawing finished lines in a freehand sketch. The T-Square and triangle may be used to draw light guide lines to help in keeping objects upright or parallel, but the finished work over these guide lines should be drawn free-hand. Border lines around the edge of the drawing may be ruled if desired.

Problems

On a sheet of Whatmans Cold Pressed or Strathmore Pencil Paper, 10 by 15 inches in size, draw a simple object first "blocking in" the general form. Group two or three objects together, blocking in their forms. Observe and express the relative proportions and the position of one object as related to the other. Objects simple in form and without too much detail or too many colors are the best.

Suggestion: 1. Paper bag with fruit by the side of it. 2. Ink bottle and one or two books in a pleasing group. 3. Cooking utensils such as coffee pot, stew pan, or boiler. 4. A suit-case. 5. Market basket with packages. 6. Glass cup with straw in it.

Avoid objects such as trees, ornate vases, delicate patterned plants, or anything of an intricate nature.

Be careful to draw the object large enough on the sheet, leaving about one and one-half inches margin all around it.

Chapter III.

USES OF LINES IN DRAWING

IN time every artist develops a style or technique more or less individual. As in any other profession, it is necessary, however, that you study the styles and methods of good men in their line and compare their different merits. The first method used by all beginners is that known as the Tentative Method.

Tentative Method: The tentative method of drawing is similar to the method previously described where various lines are sketched, while the artist is locating the correct line. These guide lines form a scaffolding of light lines which assist the eye to place correctly the outline proper. Often vertical lines are used to secure the right poise or angles of the subject being drawn. While this tentative method is a good one to use, the students should also practice direct drawing together with this method.

Direct Drawing: The style known as direct drawing consists in sketching objects without any preliminary location of the various parts of the object. Drawings of this kind are generally done with a water color brush and ink. The strokes are put down and not worked or "fussed" over after being once placed.

Japanese Drawings are made with the brush in the direct method, and the charm of this work is largely due to that crisp freshness of touch only possible by this direct method. The Japanese artist is sure of what he sees and his hand has become so trained that it records what the eye perceives. One must not mind failure at first in this method, as it is largely a matter of practice that will bring facility in direct drawing. Practice of this kind not only gives confidence of stroke but is a rapid way of cultivating the memory.

Oval And Rectangle Method: Another method used in outlining drawings is to "block in" the masses or forms by means of a series of ovals, and when these masses are in proper relation to each other,

proceed to draw the careful outline of the figure on this substructure of guide lines, correcting as you go along. This same method can be used with a series of rectangular forms, the final outline to be influenced by the straight surfaces. The chief benefit of either of these methods is to enable the student to secure the proper relation of smaller masses to the subject as a whole. Every artist has a tendency either to make his drawings too round and soft in appearance, or to go to the opposite extreme and make them stiff and angular. If your work has a tendency to round curved effects, try blocking in the subject with rectangular forms. If your work is too stiff, try the circular method of blocking.

Effect of Lines: Curved lines typify grace and delicacy. However, where used too generally they will cause weakness in the general structure of the outline.

Straight lines indicate vigor and strength. Too many straight lines cause the subject to appear rigid and stiff. Therefore you should make use of both the curved and straight lines, using each where it lends itself best to expressing the contours. For instance, if you are drawing a tree you should endeavor to show in the quality of the lines you use the difference between the fine curves of certain twigs and foliage lines, and the solid stiff lines of the tree trunk.

Various methods should be tried by the student in order that he may find the method most adapted to his way of working. After practice and experience, it will cease to be a method, and become an unconscious means of expression.

Lines of equal strength may be used over the whole subject, but more interesting variation can be obtained by light and dark lines, or by accenting the lines. If talking or singing was done only in one tone of voice it would become very monotonous, and the same rule applies to drawing of lines.

Accented Lines: Accented lines are used in three ways:

- 1—to indicate shaded sides of the subject;
- 2—to show parts of the subject nearest to you;
- 3—to indicate the important parts of the subject.

When drawing in line the artist accents largely those parts of the face where roundness occurs and where two surfaces meet, causing a shadow at their convergence.

All drawings are helped by little accenting touches or shadows put in at points where converging lines meet. This is because such strokes give stability or strength to the whole drawing just as a picture frame or chair looks better when properly and strongly fastened at the joints.

Shading: The best method of accenting probably is the first one of leaving one side of the object in light lines and the other in lines about twice as heavy, thus indicating light and shadow. It is better not to attempt any surface shading in these first drawings, as the result may be "muddy" and detract from the crispness of the completed sketch.

Express your thought when drawing from the object, and do not think too much of lines as mere lines, but as expressing the character of your subject on paper.

In using pencil it is a good plan to keep a small square of paper under your hand. This will protect the surface of the paper and keep your hand from smudging parts already drawn.

Freedom in Sketching: Keep the subjects as large as possible on the page without crowding. Large drawings will help give freedom and confidence of stroke, and make it easier for you in drawing details.

Having decided on the line to use do not hesitate to sketch it in boldly, never using a hard "wiry" line, but one which has more the texture of a stroke obtained if you were to draw on paper with the tip of your finger.

Problems

Draw in accented lines some simple subject after having first "blocked in" the large and smaller masses. Draw the same subject in accented lines after having first "blocked" it in, showing objects near you in heavier strokes and those farther away in lighter lines. These drawings should be on 10 by 15 inch sheets of Whatman pencil paper.

Suggestions: 1. A simple Vase. 2. Several Apples and Leaves. 3. Cup and saucer. 4. Hand bag or satchel. 5. Group of books, one opened. 6. Shaving Mug and brush.

Always try to arrange the subjects to show them to best advantage.

Chapter IV

THE "GENERAL FORM" IN DRAWING

THE general form may be said to be the most important requirement in drawing. The subject depends upon its general form for its character, and if the general character is lost in the drawing, no amount of perfection in technique or finish of details will restore it.

Value of Simplicity: A good drawing does not depend upon the amount of detail that is indicated, nor is it necessarily a fact that the longer a drawing is worked upon that the better it becomes. More often a drawing is ruined by overworking. It is not the longest story, the longest song or sermon is the finest.

★ The orator or essayist who tells the greatest thoughts in the fewest words is the master. The artist who is able to tell his subject in the fewest lines, is equally the master. In art "Tell the truth, but not the whole truth."

Details generally attract too much attention from the beginner in drawing, and to overcome this tendency he should study form and draw in form only. When we glance at an object our eye does not take in every little detail but only the main contour.

In drawing from the object we would look at it a great many times, and it is this which gives us the tendency to show too much detail. In drawing a flower for instance, it is not every little serration in the leaves that counts, but the general shape of the flowers and leaves; whether round, oblong, oval, etc.

If we were drawing a picture of a man such things as the hat band or coat buttons would be given the least consideration, as they are subordinate parts of our sketch. The best way to overcome the tendency to over-emphasize detail is to draw in Silhouette for the time being.

Silhouette Drawing: Silhouette drawing is the best method in which to think of the subject as a whole. The silhouette method of drawing was used by the ancient Egyptians and Greeks on their temples and

vases, but the name is derived from Etienne de Silhouette, the French Minister of Finance of France in 1759. He made the method fashionable by decorating several rooms in his house in this way.

About 100 years ago portraits were made by cutting in profile from black paper. George and Martha Washington both had their portraits made in this way.

Brush and ink should be used to mass in the general shape, after the subject has been "blocked in" lightly with pencil. When one or two drawings have been made in this way, then try silhouette drawings without any preliminary guide lines. Spot in the general shape, working from within out to the edge, truing up the correct outline shape.

Drawings for advertisements are often made in silhouette as there is no better way to tell the story simply or to catch the eye rapidly. It is an excellent method to train the eye to see the mass rather than the detail, to see the whole rather than the part, besides being good preparation for water color painting.

Our modern artists have developed this simple style to a high degree in their posters and advertisements. The idea of broad simple masses is particularly adapted for advertising ideas and is growing rapidly among American designers. A little study of advertisements in the best magazines will illustrate this tendency.

Geometric Shapes In Blocking: Subjects in nature and all other forms can generally be classified according to a definite shape. We describe objects by reference to some geometrical form. We say that it was "square in form" or "triangular in shape" and if we endeavor when drawing to define our subject within such boundaries or within a combination of such forms, our study will be much simplified.

Observe how many objects around you may come within the forms—square, rectangle, triangle, circle, ellipse or the oval.

Study in all drawing to see your subject composed of such general shapes or sections of such forms.

Compare the square or triangle or other geometrical forms of your drawing with those on the subject. Ask yourself "is my circle too large compared with the other form?" or "Is the rectangle too long in proportions?" This checking up of forms with one another will correct many faults which may otherwise be overlooked, at the same time training the eye to see forms more correctly.

★ **Memory Drawing:** Memory drawing is a most valuable aid to the artist and it cannot be overestimated. Try to draw the simplest object from memory, and when compared with the object it will be obvious how little our mind records of the actual proportions of objects constantly around us.

A good drill is to place a simple object before you and study it for a minute. Then without looking at the object draw it.

Compare your drawing with the object, and then try drawing it again from memory. Increase this drill using more difficult objects or groups of objects.

Visualizing is a most important asset to illustrators, artists, or designers, and there is no better way to train the ability than by memory drawing.

Japanese Art: The Japanese Masters recognize the importance of memory drawing and use it in their teaching. The students are taken to the Zoo to see the lion, tiger or other animal and told to study its characteristics and contours carefully. Returning to the studio they draw it from memory. Next they compare their drawings with the animal they have studied to see "what they didn't get," and then they are permitted to draw from the subject direct.

It is of especial importance that an artist should develop his memory to an unusual degree. Artists are constantly called upon to draw subjects for which they may have no data at the time.

Memory Work: In cases like this they must depend entirely upon their natural ability and any mental notes that they may have made in times past. For instance the ability to remember how many sails are generally found in a sailboat; how many wheels in a street car or the general construction of an automobile are all of value to a working artist.

It is fine practise to place on the table a tray containing six or seven common articles such as a hair brush, bell, ink bottle, tea cup, etc., and study their construction for a while. Then remove the tray and try sketching them from memory. Your progress after several attempts of this kind will be surprising.

Cartoonists: Cartoonists are very apt in this line. Their facility in glancing at a face and being able to record its characteristics is what

enables them to make sketches that we recognize and appreciate. Their quick observation catches the various lines of action in figures running, fighting, or jumping and they can then portray by a few strokes these ideas.

Retaining Character: Remember in all drawing that the spirit or character of the subject is what is most desired in all art work. A drawing in of a few pencil lines might be far superior to one worked up in colors and elaborate detail.

Modern business experts have agreed thro tests that the advertisements having the most telling and convincing results are usually drawn in a strong but simple manner.

Problems

On a 10 by 15 inch sheet of Whatman's or any similar paper draw with brush and ink a silhouette picture of some simple object. Before drawing it, first see how you can arrange your subject so that the silhouette will show its character quickly. Plan a good size and location of the subject on the paper.

First sketch the outline lightly in pencil and ink up to these lines. Later on try a very simple subject without using any pencil guide lines. Make a second drawing of some sky line, showing either trees or buildings in silhouette.

In using the brush keep it fairly well charged with ink and work from top down, as this will produce more even results. When working on finer details use less ink in the brush, as this will avoid the ink spreading in small lines.

Suggestions: 1. A silhouette of an ink bottle. 2. A candlestick. 3. Small basket. 4. Cup and saucer. 5. Chair. 6. Derby or a straw hat.



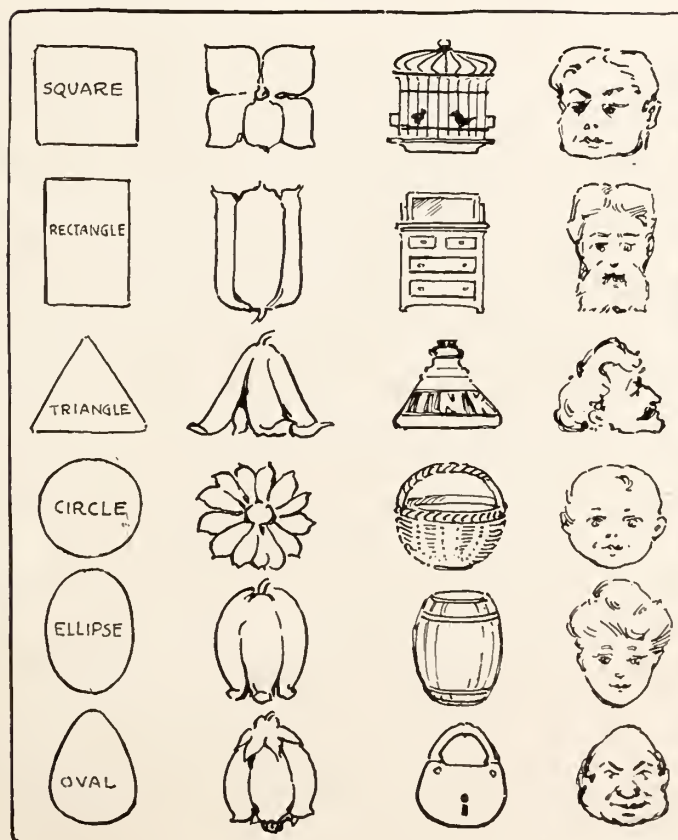
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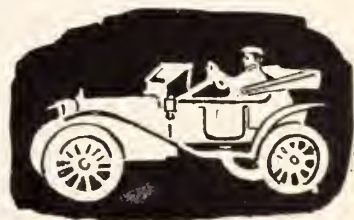
Large subjects
may be drawn with
the brush in
silhouette



Another way is
to leave prominent
and white parts
open



A white silhouette
is made by inking
the background



And a few details
can be put in if
they are needed

Chapter V

THE DRAWING OF VARIOUS TONES

WE have studied how to "Block In" our drawing; how to represent it in line; how to represent it in form; and now we will think of its different divisions of light and dark or Tones.

Art and Music are similar in their governing principles. Music is one of the mind's necessities, gratifying the mind through the ear, while Art gratifies the mind through another organ—the eye. In both arts we have the principles of value, rhythm, balance, unity, etc., and we speak of color in music and tone in art. It has been long recognized that the study of one is an aid to the other.

In music we have the seven notes which may be rendered in various tones. In art we have the seven colors, red, orange, yellow, green, blue, indigo, and violet, which may be expressed in various tones or strengths.

The Neutral Scale: In working up drawings in tone values, artists make use of tones as found in the neutral scale. This neutral scale, as it is called, contains the various tone or values of black from a pure white to the deepest black. Such a scale, if perfect, should show a gradual but quite perceptible, variation between the succeeding colors.

When an artist wishes to make a sketch in just black and white wash from some object which contains color, it is necessary that he make use of different degrees of tone to represent the various colors.

Such colors as light blues, and greens, cream, nickel and silver are generally represented by a light tone; grays, browns, olive, medium green and lavender by a medium tone; and deep greens, dark browns, purple, dark red and black by the deepest tones.

Transposing: Transposing color into terms of black and white requires careful observation and comparison of the various parts with one another. Do not confuse tones with light and shade. An object may be

lighter than another even though both are placed where the brightest light strikes them or the deepest shadow.

Study the various objects around you. Take a common article such as a whisk broom, paste jar, or paint can, and decide which parts would look best represented by a light tone of wash, which by a dark tone, and which by a medium tone.

Flat Tones: By keeping the tones of wash which are used perfectly flat, without any attempt to give roundness or modeling, very pleasing results can be obtained.

When we have mastered this idea properly we can then take subjects, no matter what color they may be, and sketch them in a black and white drawing, which will show the subject in correct tones.

Avoiding Complex Effects: In beginning such a drawing we should always work so as to have tones which are in true harmony with each other. Many drawings become complex and "mixed" because too many degrees of tones are used. An artist speaks of a picture as being well "spotted" when the darks and lights are so placed that they are simple and well related to each other.

The restfulness, and artistic effect produced by work in few tones without any bright highlights or deep shadows is so evident that it is largely used in mural painting, cover designs, and other forms of decorations.

This method is also used in advertising, such as magazine advertisements where strong and yet simple effects are necessary. The present trend is so strongly in favor of this style that it is only necessary to pick up any standard magazine to see dozens of good examples of the flat decorative tone work.

Brush work should be continued for working in tones. The best paint to use is black water color, either in tubes or pans. The kind of drawing you will produce in this way is generally used by illustrators and is known as a black and white wash drawing. Subjects properly drawn in this manner can be easily reproduced on metal for printing and it is for this reason that we find this method so generally used.

The paper for wash drawings is of a texture such as Whatman's, Windsor and Newton's Illustration Board, or any such rough-surfaced paper.

Working Instructions: Materials for this work are as follows:

A medium sized brush, No. 4 or 5.

Black water color paint, in tube or pans.

Blotter or cloth for wiping brush.

Plate or mixing dish for paint.

Thumb Tacks to keep paper stretched.

With a wet brush take a little of the paint from the water color pan onto the mixing dish. Stir it up well until evenly mixed. If it is too dark for the tone you wish to use add a little water; if too light add more of the paint. As a water color tone has a tendency to dry lighter than when first applied, it is a good plan to put a few strokes of the wash upon a piece of paper and let it dry in order to test it.

Brush Work: Keep the brush well charged, but do not use too much water. The paint should be thin enough to flow easily from the brush. On any surface, but particularly large areas, a wash of plain water placed on the desired section first, will cause the color to flow evenly and dry smoothly.

Never work over a surface of wet paint, as it produces a "muddy" drawing. Wait until it is thoroughly dry before increasing the tone by an additional wash of paint. The best drawings are those made in firm continuous strokes, keeping the color so that each brush stroke slightly laps the previous one.

Three Divisions of Tones: The best method to use in first attempting a wash drawing is that of locating the three divisions of tones. First locate that which is to be the darkest section, and next that which is to be the lightest. Then put in a medium shade which will be between these two, and you will find your subject easily and rapidly produced in three tones.

Highlights and shadows should not be indicated. These will be brought in later on. To study the correct form of an object and produce it in various tones is sufficient material for the present. The addition of anything more would tend to cause confusion.

For the time being, your efforts should be devoted to the sketching of objects with a view to obtaining their correct form or outlines. Next you should try to add to this by using various degrees of tones to re-

present the various parts of the object. Remember to keep the tones flat and simple without any attempt at modeling of surfaces.

Different lightings on the subject change its tones. The tone that may be used for the blackest portion when a subject is in bright light, may be the lightest tone when the subject is placed in a subdued light.

Lighting: A diffused or soft light such as that coming through a curtained window, or the general lighting on a cloudy day, causes the various tones to show but little difference between them. Drawings of this kind have but little variation between their lightest and darkest tones, and must be carefully handled so as not to appear too flat and lifeless.

In the previous chapter we made our subjects in a silhouette of dark only. In this lesson continue the silhouette method of working using the three tones—dark, medium and light—instead of black alone.

Problems

On water color paper make a series of seven tones in black wash ranging from black to white. Cut out and mount on cardboard. This will enable you to cut out sections from the smoothest parts of the tones you have washed in and mount them in an even scale. Keep the same degree of depth between each tone.

Next draw a simple group of objects, selecting a subject having various tones. With a brush, make flat washes only, producing the correct tones or values between each area. It is a good plan first to outline the subject lightly in pencil before laying in the wash.

Suggestions: 1. Garden implements, such as a hoe, rake, spade, etc. 2. Hardware, as pliers, saw, hammer, and plane. 3. Umbrella or shoes. 4. Straw hat. 5. Paint bucket and brush. 6. Some simple flower.



FLAT TONE ILLUSTRATIONS



THE NEUTRAL
SCALE



3042

Chapter VI

DRAWING OF LIGHT AND SHADE

IN the previous chapter we found how strong decorative drawings can be obtained by the use of flat poster tones. These were done without any attempt to give roundness or modeling. But there are often times when we wish to have drawings in which the objects have a modeled or naturalistic appearance. In order to obtain this effect we must make use of what is called light and shade.

Light and Shade: Light and shade refers to the varied effects produced on objects, not by their own color or tone, but by the effect of light upon their surface.

To many students, light and shade is a difficult subject. Many find it easy enough to secure their outlines, but when they draw in the lights and shadows the drawings are ruined.

An excellent way to study light and shade, and to gain an understanding of massing shades, is to draw some object by means of shades and shadows only. Begin with the shadow sides of objects, leaving the lighter sides to be treated last. In this way it will soon become apparent how little detail is really needed after the main shadows are expressed. On the other hand, if the light parts of the picture are treated first, there is apt to be so much elaboration of detail that all contrasts of light and shadow are lost by the time the darker parts are drawn in.

Shadow Studies: In every object there are always found many small or subordinate shades which vary so slightly from the main tone that they may be all classed in one general shade in your drawing. By half closing the eyes you will be surprised to see how simply the shadows take their places in a subject, and what large sections can be represented by one simple shade.

It is a good plan first to outline carefully the general form of the subject in pencil, and next to outline in a definite manner those sections which will be represented in shadows. In this way any slight changes

or corrections can be made before drawing in the final tones with the brush.

All shades that contain more dark than light should be made perfectly dark; those that are medium shades should be omitted, thus leaving only the light and shade of the object. After you have worked this way a short time from objects, you will be readily able to see the correct relation of light and shade, and to simplify shadows.

No attempt should be made to blend the lights and shadows, but a definite separation should be shown between them. Slight lights and shades, as well as lines which are not essential to the character of the subject, should be omitted, as they will only confuse the effect of the drawing.

Shade and Color: Care must be taken not to mistake color for shade. The two are quite independent of each other, and should not be confused. Careful observation will soon lead you to be able to detect the difference between the color of an object and the tones produced on it by the action of light on its surface. Remember that the deepest shadows will be on that side of the object which is away from the point from which the light comes.

Cast Shadows: The shade cast by an object upon the ground or surface on which it rests is called a cast shadow. In planning a subject for sketching, it is always best to arrange it so that the cast shadow is not too large or prominent, as it will be apt to detract from the object itself and cause confusion. A shadow is darkest nearest the object that casts it. Care must be taken not to go to the extreme of putting shades in impossible places or shadows where they do not belong. Nature does not do this, and she is the best guide.

In sketching objects having a curved surface, as an apple, tea kettle, or a vase, remember that the shadows on their surface always follow the contour of the object. If the apple is curved, the shadow on its surface will follow that curve. The moment a straight shadow is placed on a curved object, the drawing loses its shape and character.

When you have mastered these ideas you have the basis of all correct modelling or shading of objects in Nature. The plan of first thinking of the general form of an object, and then separating its surface into distinct divisions of light and shadow, will go a long way toward making the drawing of any subject much simpler.

Shades In Illustrations: Many objects can be fully represented by drawing only the shades; and many drawings for advertisements and designs are made this way. The principle of drawing shadows in this way underlies the work of many Illustrations. Note in the illustration sheet (plate 5) how much more pleasing an effect the word "art" has when its shadows only are used.

Shades and shadows are the partial absence of light, and have no substance; but in drawing they are treated as solid forms. It is not necessary, however, to make the light and shade in a drawing of the same brightness and depth that we find it in the real object. This is usually impossible. It is only necessary to keep the relative proportion of light and shade correct.

Representing Light and Shade: The sun is many times brighter than the whitest paper, and the deepest shadows in nature are many times darker than the blackest pencil, so we must let the highest light be represented by the whiteness of the paper on which the drawing is to be made, and the lowest or deepest shade be represented by the blackest mark we can make with our pencil.

These are the two extremes beyond which it is impossible to go; yet both of these extremes may be used to represent our subject truthfully, by keeping the lights and shadows in correct relation to each other. Some of the best drawings are made by keeping all the shades and shadows lighter than the extreme black, and all other shades in proportion.

Gradations: In your finished drawing, it is sometimes possible to give a more complete effect by adding a second smaller shade of black inside the main black shadow. This shade should always be considerably smaller and narrower than the large one, and be drawn so as to leave a narrow white area between itself and the main shadow. Such an effect is shown in the figure of the Blacksmith in the illustration sheet.

Relief Effects: The appearance of objects or words standing out in relief is quickly obtained by means of shadows only. The plan of drawing subjects by means of shadows alone will develop strength and directness in your work. This method should be carried throughout your work; whenever the shade or shadows can be used to indicate an outline, no real outline should be drawn.

Note the modern posters and car advertisements, and observe how much is told by means of shadows only.

Problems:

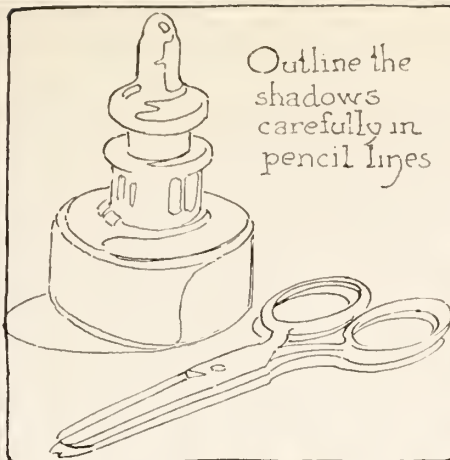
Arrange two or three simple objects for a shadow study. Sketch the subject carefully, placing and outlining shadows in pencil; then ink in the shadows only with a brush. After you have done this successfully try the same subject, or a similar group, using a medium tone of watercolor instead of the solid black ink.

Both of these drawings should be on the regular Whatman or Strathmore Water Color Papers.

It is best to choose characteristic objects in which the shadows define themselves easily. Avoid filigree bric-a-brac, ornate vases or objects that are too plain in shape to contain shadow possibilities.

Place your study where a good contrasting light will fall on it from one side only. If sketching at night avoid having your source of light too directly above your study as this will result in poor effects.

Suggestions: Candle and Candle Stick. 2. A Shoe or Slipper. 3. Bunch of Grapes. 4. A Keg or Barrel. 5. Flower Pot or Plant. 6. A Brass or China Vase.



ART
ART

Shadows correctly placed
will suggest the outline



Chapter VII

LIGHT AND SHADE

The Highlights

WHEN we look through the magazines and see the work of modern illustrators, we often wonder how it is possible for them to obtain such pleasing effects in so few strokes.

Individuality: Some of us may admire the work of one artist; some of another, according to our personal taste. Every artist or illustrator has his individual way of working, and it is not the intention of these lessons to destroy any individual tendencies. But in studying and carefully following the suggestions given here, you have the basic principles used by all artists who are successful.

We have found that to represent truly any object we must sketch it so as to show its correct form and character. Then we found that various colors in the subject we are drawing can be represented by different tones or shades of black watercolor wash.

After that we added to these ideas by placing an object in a good light and representing it by means of shadows only.

When drawing the light and shade of an object it will be found that these two subjects can be represented in two distinct divisions. That is, one side of the object will be generally in the shadow, while the opposite side will be in the light.

Accent Spots: You have no doubt noticed in sketching various subjects, that certain parts of the general shadow tone were a deeper or more intense black than the rest. These spots or accents generally occur at the junction of lines or where a part of the subject is deeper or more deep set than the rest, as the carving on a box or the mouth of a bottle.

Highlights: Now on the highlight side, the same thing is true to a certain extent. We find on the high light side that the general tone is light. But in certain spots, you will also find a light much more brilliant than this general tone. These spots or areas are known as highlights, meaning naturally, the highest or most brilliant parts of the light tone.

It is good to remember that on irregular or curved objects these highlights are usually found at those points which stand the farthest out from the object itself.

With this idea in mind, let us suppose we are about to sketch an object so as to represent both its highlights and shadows. Take a brass vase, for instance, place it where a good light falls on it from one side. On the side closest to the source of light, you will notice a large general light tone broken by little spots or highlights. On the side away from the light will be a medium shade darkened here and there by smaller sections of black or accents.

In these four general divisions you have the key to all good light and shade sketching—Lights broken by highlights and darks strengthened by black accents.

Sketching in Highlights: As we have seen, shadows used alone will often represent an object very fully. Highlights used alone will often do the same. Note in the illustration sheet how various objects have been drawn in highlights alone. This is particularly well shown in the sketch of the Indian. Notice that it is not the shadows which make the result, but the white highlights painted on the black background.

This manner of producing drawings is a little confusing to some beginners, and for that reason it is a good plan to make all your drawings with Chinese White water color or white crayon on a black or a dark gray paper. This will prevent your becoming confused with the method in the previous chapter of producing effects with shadows only.

Highlight Methods: A good drill is to select some object which reflects light easily as a Glass Cup or a Patent Leather Shoe. Place it in a good sharp light and proceed to sketch in the white highlights with a white crayon or white water color on dark paper. A good idea is to use a dark gray board as the highlights can then be outlined in pencil before putting them in with the Chinese White.

Another way is to use chalk on a blackboard.

One of the best ways is to take a sheet of water color paper and outline the subject on it as if for silhouette work. Then carefully locate the highlights and outline these lightly in pencil also.

Working Instructions: Next mix a medium tone of gray water color wash. Then brush a wash of clear water on the surface of your drawing,

covering everything with it but the highlights. While this is still damp, put it in the gray wash over the sketch, leaving the highlights in the pure white paper. The finished result will have the effect of a gray silhouette with highlights in it.

Flowing the clear water over the surface first will cause the gray wash tone to dry evenly and smoothly.

After you have made several practice drawings in highlights only, make a sketch in shadows only, as was studied in the previous chapter. When this is completed, you will have one sketch showing the subject in shadows only and the other in highlights only.

Now if you will take your highlight drawing of the subject and finish it up by drawing on it the shadows of the object you have made a drawing with both highlights and shadows in correct relation to each other. These shadows which you put over the highlights should be in a dark wash but not a solid black.

If the contrast between the shadows and the medium tone of your drawing is too sharp, they can be blended slightly with a light wash tone where they meet.

Completing the Drawing: Illustrators find these methods of drawing both artistic and rapid. Selecting a gray paper they sketch in the darks with a dark wash and add the highlights in white paint. In this way they quickly secure a drawing with the light, medium and dark values in good relation. This not only saves time, but eliminates the tendency to put too many varying shades and highlights in one drawing.

In all this work the way you arrange your subjects has a great deal to do with the success of your drawing. Placing a stiff card or board near your object on the shadow side will help cut off any confusing light from that direction.

Bright Light: There are three grades of lighting—bright light, half light and diffused light. Bright light is direct from the sun. Subjects drawn in this light have very sharp bright highlights and dark contrasting shadows. The effect in the drawings is brilliancy and contrast.

Half Light: When the sun is partly obscured by haze or light clouds the light is called half light. In half lights the contrast naturally is not so great, the shades and shadows being about equal in depth.

Diffused Light: Diffused light is the light of an ordinary room or of a cloudy day. In diffused light the shades and shadows are not defined; they are indefinite and blend together. A diffused light is usually preferred by artists, for the reason that it does not contain strongly defined lines and edges or strong contrasts of light and shades.

It is always best for the beginner to draw objects in the bright and half lights, as the shadows and shades possess a definite form and can be easily seen.

Problems

Select some simple object which reflects light and make a careful pencil outline of its general form and of its highlights. Sketch these lines lightly so as not to spoil the surface of the paper.

When the outline is sketched to your satisfaction finish the drawing in a gray silhouette wash, leaving the highlights white. When this is dry, put the shadow tones on the opposite side as described in this chapter. Some working ideas will also be found on the illustration sheet.

Suggestions: 1. A glass cup. 2. Pair of scissors. 3. Any brass object such as a vase or candlestick. 4. An aluminum stew kettle. 5. Ink bottle. 6. A lamp or electric light.

First carefully
outline the object



and the lights
with light pencil



Half-tone Wash on White Paper

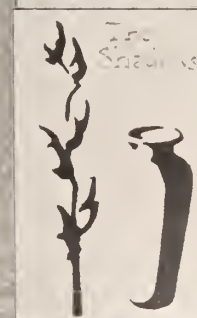
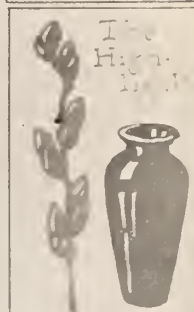
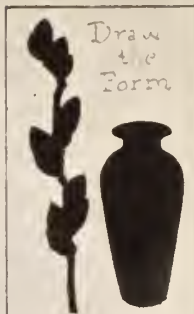
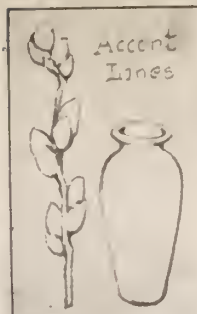


Then a
wash of water
brushed in rapidly
and carefully
will cause



the
color to flow
evenly and correctly

We have now learned how to



Illustrators pro-
duce bold effects
by the strong
use of light
and shadows



Chapter VIII

THE HUMAN FIGURE

A GREAT deal of time is spent in art schools in the study of figure drawing. Sometimes years are spent in sketching from figures with charcoal, oil paints, and water colors in order to develop a high degree of efficiency in this line.

Art students are often first required to study the figure by drawing from casts or good models of statuary. In addition to this, the artist studies artistic anatomy in order that he may be familiar with the various effects produced in the contour of the body when in different poses.

Figure Drawing: This is all necessary in an artist's training because we find the human figure plays an important part in all the arts. An artist who understands the proportions of the figure and how to express action finds much use for his knowledge. This is particularly true in illustrations, mural paintings, magazine work and advertising.

Many beginners in art work are so anxious to try their ability in figure drawing that they sketch from life without the proper preliminary training. This plan never produces good results, often resulting in discouragement. In music we first study the scales and chords before attempting difficult compositions; so in art we must first study the laws governing the proportions and contours of the figure before we can expect to produce a good drawing from life.

While opinions differ slightly regarding the exact proportions of the figure we find that the average measurements are the same.

Proportions Of Human Figure: In drawing the human figure we find that its general proportions are based on the measure of the head. The figure of the average man measures seven and one half heads high. Thus the artist, after having first drawn the head, sketches the remaining proportions of the body in harmony with this. The figure of the base ball player in the working sheet will illustrate this.

It is a good thing to remember that while this proportion is true in actual life, that in illustrations and fashion drawings the figures are often made eight and nine heads high in order to give grace and dignity.

While a whole book might be written on the subject of figure drawing, if the proportions given below are studied and carefully followed you should have no trouble in obtaining a sketch which will have correct proportions at least. Confidence of stroke, correct balance, and symmetry can then be acquired.

Proportions of Arms, Legs, Etc.: Some good points to remember are as follows:

1. When the arm is dropped from the shoulder and extended full length the end of the hand will reach to the middle of the thigh bone.

2. The distance from the middle of the figure to the top of the knee equals the distance from the knee to the bottom of the foot.

3. When the two arms are extended, the distance from finger tip to finger tip equals the length of the body.

4. The distance from the arm pit to the elbow joint equals that from the elbow to the wrist.

5. The foot just about equals the height of the head from the top to the base of the chin. The hand if placed over the face will reach from the chin to the center of the forehead.

Hands and Feet: The general tendency in figure drawing is to make the hands and feet too small for the rest of the figure. If this last item of the relative size of the head and hands is remembered, much more accurate results will be obtained.

In all these proportions it is a good plan to have them definitely in mind and use them in a general way when sketching the figure. Do not worry too much about the exact mathematical measurements, as you will produce stiff lifeless effects in your drawing.

After having the proportions of the figure in your mind, next study the head itself. We find that the eyes are located halfway between the top of the head and the chin.

Head Measurements: This gives the first general division. Next we find the base of the nostrils is about halfway between the eyes and the chin. Then if we divide this lower space into thirds, we find the upper division takes from the base of the nose to the top of the lower

lip. The second division takes from the top of the lower lip to the center of the chin and the third part from this point to the base of the chin.

These points are not difficult to remember, and when once placed insure a good basis for portrait sketches.

The Ears: The ears equal the nose in length. In a profile or side view of the head, you would draw the ear and the nose on a level. In other words, the ear and the nose are located at about the same height on the head.

The Eyes: In studying the eyes we find that the distance between the eyes equals one eye, and the width of the nostrils also equals that of the eye. In drawing the eyes you should remember that the shape of the eye itself is not the same at both sides, but is wider toward one end. A correctly drawn eye will not have that elliptical, almond shape so common in amateur drawings.

Another point to remember is that the line defining the lower lid of the eyes should be drawn much lighter than that of the upper lid. A hard definite line all around the eye gives a metallic stare which looks unnatural.

In sketching figures the common tendency is to draw them too small on the sheet. A good way to overcome this is to indicate by two horizontal marks the points where the top and the bottom of the figure will come.

Next, in a few simple strokes indicate the general sweep or pose of the figure—whether standing upright, leaning over, reclining, etc. After this the position of the head and spine should be indicated, as a basis for the other parts of the body.

How To Begin A Figure Drawing: A good way to keep proportion in the body is to consider the figure as a series of masses or forms placed one upon the other. After you have divided the figure into head lengths and sketched in the general lines of direction of the legs, arms, etc., then block in the head, torso and the rest of the body in large general masses or areas. This will help you to keep the relative proportion of the various parts. The details can then be worked up after everything has been correctly “blocked in.”

Backgrounds: Openings made by the figure against the background will give you an opportunity for checking up your drawing. For instance

if in a side view the figure is reading a paper, see if the space on your drawing between the body and the arms is the same shape as that presented by the model. This method will be of considerable help in landscape work as well as in figure drawing.

Training The Eye: Another way to check up proportions is to hold your pencil at arm's length and measure with the thumb along the pencil some certain part of the model. Now compare this measurement with some other part of the model which you have already drawn. Thus you can obtain fairly accurate proportions in your work. In this your eye will become trained to judge relative proportions without the aid of a pencil. This method is much used in art schools and is excellent to use when drawing any subject.

As the figure is a difficult subject to draw successfully, it is always best to begin your work by sketching profiles or side views. First, draw the head until you are fairly familiar with its construction. Next try several sketches of the whole figure in a standing position. After this, several poses of your model seated in a chair reading or playing some instrument should be attempted.

Profiles: After side views have been fairly well executed, poses showing a front view can be worked out. Remember, it is better to make one satisfactory sketch than several which have evident mistakes.

A good way to start the profile view of the head is to sketch a square and draw the face within it. This square outline will enclose an area reaching from the top of the head to the chin and from the point of the nose to the back of the head.

Portraits: Actual portraiture should not be considered when drawing figures at the beginning. If the general character of the figure is obtained and the correct proportions put down, a big step has been taken in the right direction. Actual likeness to the model can be worked for after these points have been mastered.

In your figure work you will find the correct drawing of the hands to be difficult. For that reason it is a good plan to make a number of drawings showing the hands in various positions, as clenched, pointing, wide, etc. These drawings should be large enough to allow you to sketch in all the details in firm strokes.

Note in the working sheet the relative proportions of the fingers to the palm of the hand, and how the knuckles divide the finger into decreasing dimensions as they approach the tip.

Problems:

Have someone pose as a "model" for you. Place him so a side view is visible and have him pose for ten or fifteen minutes at a time.

With a soft pencil block in the lines suggesting the general pose of the figure. In the second pose block in the masses indicating the various parts of the figure. In the succeeding poses finish further details, always putting in the most prominent lines first. Small details, as buttons, lace work, pins, etc., are subordinate and should not be given too much attention.

2. Make a second drawing of a face in profile, working for correct proportions. Watch particularly the shape and location of the eye.

3. Make a third drawing of your hand. This should be at least "life size."

After these have been drawn to satisfaction, the same subjects can be worked out using a front view instead of a profile.

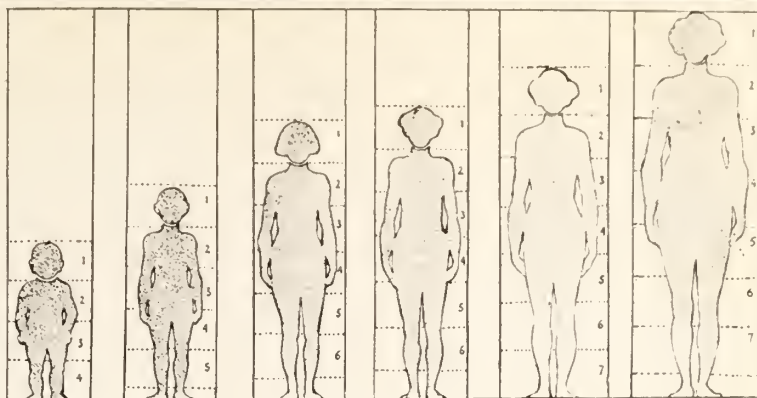
Suggestions: 1. Lady seated in rocker, sewing. 2. Boy bending over, tying shoe. 3. Man in arm chair, reading. 4. Girl at table, writing letter. 5. Man walking along sidewalk, with cane. 6. A boy scout, saluting.



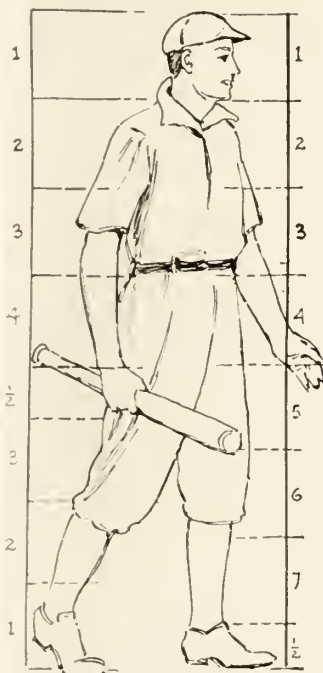
The divisions of the head



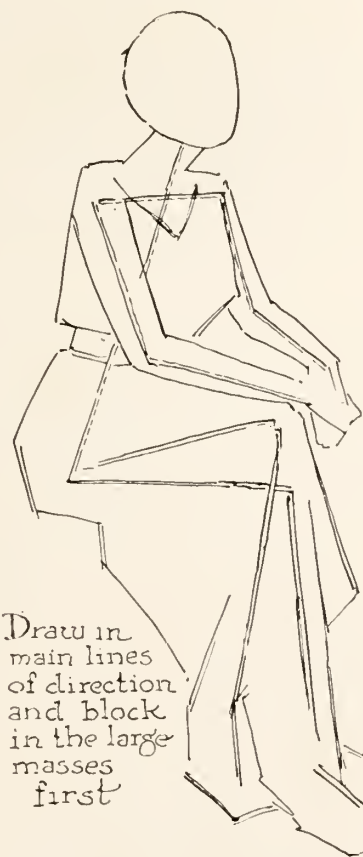
Note how the lines of the hand are based on radiation.



The relative proportions of the head from childhood up.



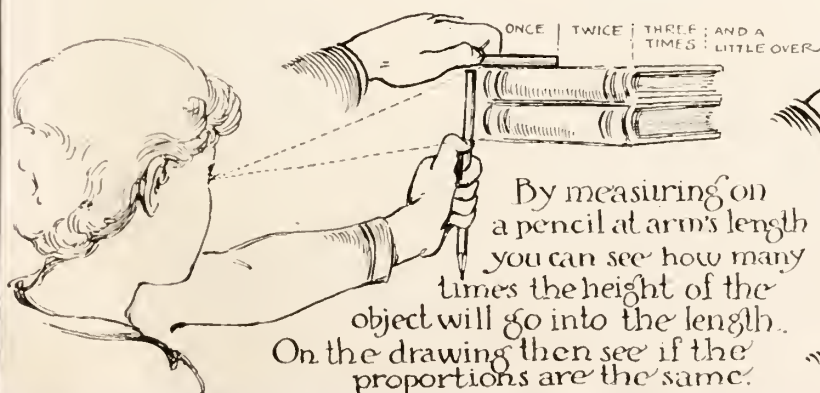
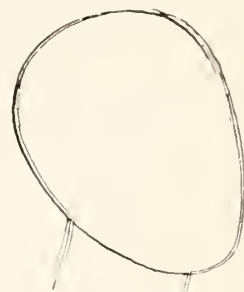
The figure is, $7\frac{1}{2}$ heads in height



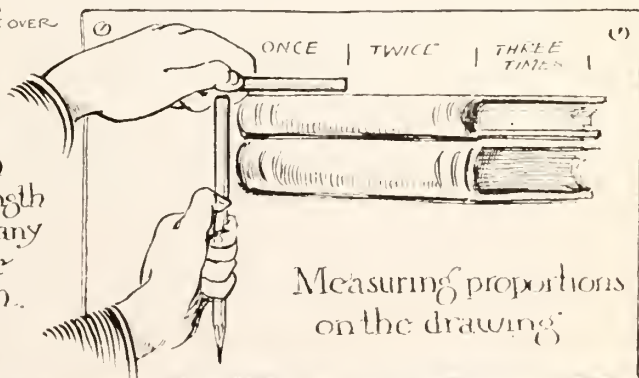
Draw in main lines of direction and block in the large masses first



before putting in the finishing details.



By measuring on a pencil at arm's length you can see how many times the height of the object will go into the length. On the drawing then see if the proportions are the same.



Measuring proportions on the drawing

Chapter IX

ACTION DRAWING

AFTER we have drawn from seated or standing figures, we naturally will wish to sketch models in action, sweeping, walking, or running.

Such sketches are termed action drawing because they represent the figures in some form of motion. The amount of action shown may be slight such as a girl seated in a chair, threading a needle; or it may be very evident as a boy jumping over a fence.

Balance: In all action figures it is good to remember that the greater the action shown, the more the figure is thrown out of balance. For instance, if we have a figure standing upright we find the center of balance of this figure falls from a point directly beneath the base of the throat to the center of the feet. Even though the arms be extended or the head thrown back, this point does not change so long as the figure remains stationary.

Locating Center Of Balance: When a figure is shown carrying a load, as a pail of water or a suit case, we find that the center of balance is shifted slightly to the opposite direction from that in which the load is being held. For instance, if a girl is carrying a satchel in her right hand, we establish the top point of the center of the balance slightly to the left of the base of the throat.

Establishing these points correctly is a great aid in figure work. By means of them you can locate the top and bottom points of the figure and indicate the action shown by the model.

Motion: When the figure loses its center of balance, we have motion, as in running, jumping, etc. The farther the figure is thrown out of balance, the more violent this motion will be. If we show a figure walking, we indicate the arms but slightly thrown forward or backward, and the legs fairly well separated in the act of stepping forward.

In running, these lines change entirely. The head is thrust forward, the arms swing or are partly raised, and the legs lifted higher from the ground. In jumping, we find the body pulled together in a lateral direction, the line of the spine curved and the feet thrust forward.

So in all the various poses which the body is able to assume, we find that they can be readily shown by a few simple strokes or action lines. For this reason, artists and instructors make use of drills in which the figures are shown by means of straight lines and an oval for the head. This idea you will find shown in the illustration sheet.

Action Figures: You will note that only one line is used for the torso. This is in order to eliminate the detail parts of the figure and work for action or motion only. In this way you will be able to indicate the correct swing or character of your model. The rest of the figure can be added around this later.

The importance of practise in this manner cannot be too highly estimated, as it will establish freedom in your figure work. It will also give you self-reliance in sketching poses where no model is obtainable.

Minute Poses: In art schools periods are often devoted to what are known as "One minute poses." In these the model is requested to assume some characteristic pose and keep it for one minute. During this time the students study the pose and make mental notes as to the general lines and action of the figure. When the minute is over the model rests, while the students sketch the pose from memory.

This drill is surprising in its results, as its value is double. It not only strengthens the memory and observation, but it destroys the tendency in students to insert any unnecessary detail in their drawings.

Progressive Steps: In all figure drawing a few action lines should first be sketched in as a foundation. Try drawing a figure in three progressive steps. First show the body, arms and legs in straight lines and the head as an oval. Next sketch the same pose indicating the body in a blocked form, showing the mass of the body, legs and arms and the feet and hands. Last, make the same preliminary blocking of the figure, but finish the drawing indicating the clothing, features, etc. Try as much as possible to keep the same pose in all three drawings.

Certain directions of line convey definite impressions. For instance, we find that:

Oblique lines give movement.

Vertical lines convey height or exaltation.

Bowed or bent lines may convey dejection or remorse.

Lateral or horizontal lines indicate repose or calm.

Use of Line Action: A good knowledge of the effect of the direction of lines is valuable to illustrators and painters. All of our best mural paintings have been carefully figured out from this standpoint. We often find famous masterpieces in which one of the chief charms is the effect produced by the general sweep or composition of the main lines in the picture.

This is also true of many charming Japanese prints in which the composition is the main attraction. In the modern French posters, where so much is done in outline, we find the general effect of line direction has been cleverly planned.

Optical Illusions: In all art work, particularly designing and interior decoration, the artist must remember the effects produced by what is called "optical illusion". We refer to things which appear a certain way to the eye as regards proportion, size, etc., when they are not so by actual measurement. For instance, if we take two rectangles of equal dimensions and put vertical lines in one and horizontal lines in the other, they will appear to be different in proportion. The one with vertical lines will appear higher than the one with horizontal lines. Thus, if more height is desired within a certain space where figures are to be used, care is taken to use upright lines of general direction.

Interior Decoration: Suppose in interior decoration the designer has a room in which the effect already tends to give considerable height. In adding any ornaments or panels of figures he generally plans them so that they will give a lateral or horizontal effect. This will offset the vertical lines of the rest of the room.

Obtaining Width: If, on the other hand, he should have a room in which he wishes to give greater height then he would use lines which are vertical in direction. Other interesting optical illusions are shown in the illustration sheet.

As suggested in some of the previous chapters, various methods of treatment may be used in drawing figures. The figure may be drawn

only in outline, or in silhouette; it may be rendered in flat tones, or in shadow, or in highlights.

Decorative Figures: Besides the above methods, the figures may be rendered in a decorative style. The designer must always adapt his figure work to the surface which it is to cover, whether a panel, stained glass window or cover design. To do this he makes his work conform to certain rules of design, the principle of which is that light and shade are eliminated. If relief is shown, it is suggested largely by an outline or by contrasting one tone against another.

In studying action drawing, a good drill is to take a large sheet of paper and a soft pencil, and see how many interesting poses you can sketch by means of Action Figures. In all this work do not be afraid to put plenty of action into them by sketching the arms and legs at varying angles. Care should be taken not to show a leg or an arm bent backward in some way impossible to nature.

If the hands and feet are indicated by little triangles, additional action can be given to the figure. The head will look better if drawn somewhat the shape of the skull, rather than that of an ellipse or oval.

The more you draw these figures the more interesting you will find them, and the more confident you will become in figure work.

Action Illustrations: In looking through the magazines you will notice that practically every illustration shows figures in action of some kind. Many of these figures have been drawn without the aid of models, as the artists have become so familiar with figure drawing that they are able to originate good poses from memory. For one who wishes to develop into a good illustrator, continued practise in action drawing cannot be too strongly advised.

Action In Advertising: We find lines of action used extensively in advertising work. Both figures and decoration are often arranged from this standpoint. Its main value in advertising lies in the fact that it catches the eye. In planning an advertisement based on this idea care should be taken that the action concentrates the attention upon the subject of the advertisement, and does not carry the attention away from the main point of interest.

The action in decoration or advertising should never be so violent as to give a displeasing or "dizzy" effect to the design as a whole.

Animal Drawings: Animal drawings may be represented in action lines and used the same way as figures as the basis for the completed drawing. Animals seldom keep an attitude of action long enough to be drawn carefully. The student must depend on a rapid notation of the main lines only, relying upon a knowledge of the details to finish the sketch. Or he may sketch the main lines from the animal's pose and draw in the detailed parts from the animal afterward, conforming them to the first lines of action.

Problems:

Have some one pose as a model in action. The poses will necessarily be brief. Draw in quickly the first pose, add more lines in the second pose; completing in the third or fourth pose.

If the "swing" or "dash" to the figure is secured, be content with first efforts, as details and characteristics can be secured in later work.

Be careful in all this work to keep the relative proportions of the arms, legs, etc., to the body correct.

After you have made several drawings in this way try the one-minute poses as explained before. These are much more difficult, but will be found very interesting and helpful.

As a last problem, a completed sketch of a model in some action pose can be worked out.

Suggestions: 1. Playing golf. 2. Chopping wood. 3. Hammering nails. 4. Carrying a pail of water. 5. Sweeping. 6. Throwing ball. 7. Waving flag. 8. Jumping. 9. Swinging. 10. Dancing.

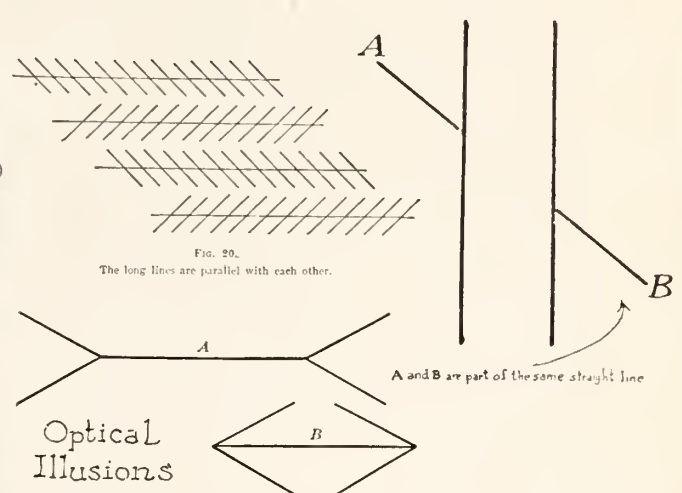
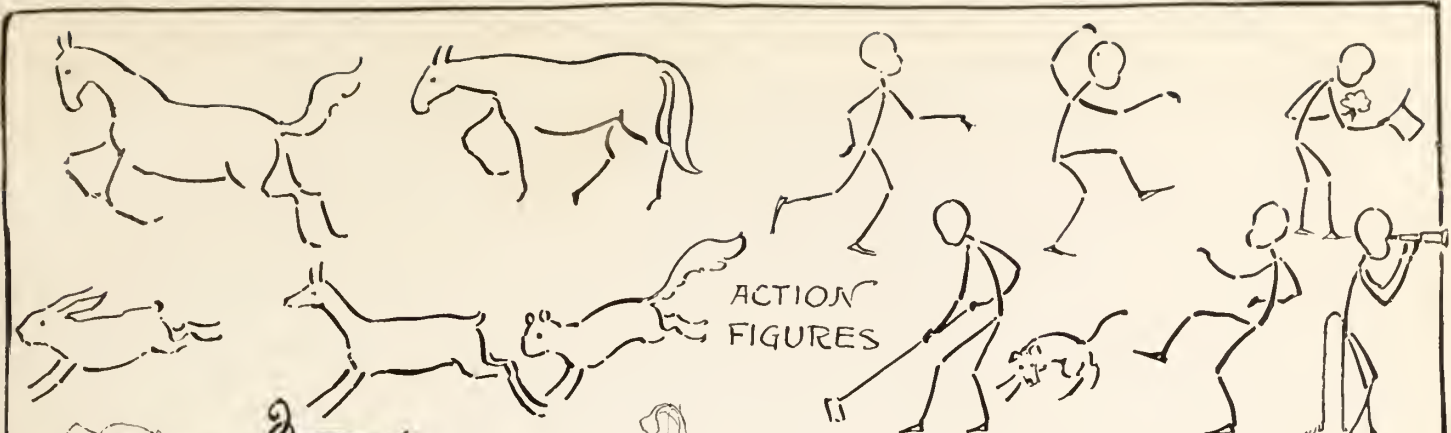
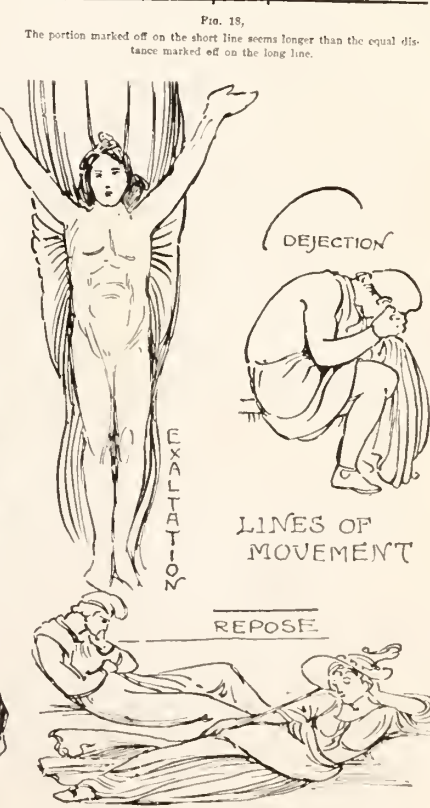


FIG. 20.
The long lines are parallel with each other.

FIG. 19.
The length of the horizontal line A is equal to B, but it seems longer.



The foundation of a figure drawing should be the action lines and the rest of the drawing constructed upon these lines.

Chapter X

PERSPECTIVE IN DRAWING

OCCASIONALLY it happens that we see a sketch or an illustration in which the objects indicated do not seem to be in correct proportion to one another.

Poor Illustrations: For instance, we see a picture of a man in his library, looking over some books. From the size of the chair in the foreground, and that of the man in the background of the picture, we feel certain that a man of that size could never sit in so small a chair.

Nine times out of ten, we find that this mistake has been made through carelessness or the lack of knowledge of what is known as perspective.

This subject of perspective is confusing to many students because they try to grasp too many of its principles at one time. In this chapter we have put down in as simple a manner as possible the most essential points to be remembered.

Perspective is studied by artists in order that they may be familiar with the rules that govern the relative proportions and receding lines of all objects in nature.

Definition of Perspective: Perspective is the art of drawing upon a flat surface, objects as they appear to the eye, regardless of their actual size or distance.

In studying perspective we find that our knowledge often deceives our eyes. We know that the opposite side of a table is as wide as the nearer side, and so we carefully draw it that way on our paper, while in fact, the farther side appears shorter to the eye and should be so drawn.

Again, if we were drawing the top and bottom of a vase or other cylindrical shaped object, we draw the top and bottom curves parallel to each other, when they really do not appear so to the eye.

How To Think of Perspective: This, then, is the important point to remember, in first studying perspective, that we must draw the sub-

ject before us as though we were tracing it on a large flat piece of glass, placing each line just as it looks to our eyes. This idea will help us to draw all the various receding and slanting lines just as they appear, and in this way obtain correct perspective relation.

If we stand by a railroad, we will note that the rails appear to come closer together until they converge at a point on the horizon. This horizon line in perspective is always to be found at a level with our eyes.

Perspective In Nature: If we climb a hill and look back we still see that the rails converge at the horizon and that every upward step has brought the horizon to a higher plane. Thus we can always know that when the horizon is not visible, that the point of convergence or the "Vanishing Point" as it is called, will always be at a level with our eye.

To prove these points, it is only necessary to draw on a piece of glass with ink or greased crayon, the outline of objects placed at a little distance behind. When you have done this you will notice that all the straight receding lines appear to converge toward the same point.

Perspective Tests: To see the difference between subjects as they really are, and as they appear to the eye, make the following tests:

Hold up two strings or two straight edges so that they conform with the receding edges of a book cover placed a few feet away. Note how the edges appear to recede. With cardboard strips, do the same with converging lines of a room interior, and note how the windows decrease in height. (See Plate 9).

When out of doors, it is a good plan to look for these receding lines in nature. Note how the distance between telegraph poles or the squares of a sidewalk decrease proportionately in size as they approach the vanishing point.

How Perspective Effects Size: Distance is an important factor in perspective. It affects objects in nature in various ways. Objects of equal size will appear smaller the farther away they are situated in the scene.

Aerial Perspective: The colors of the objects are also dimmer and less strong in contrast when in the distance. When the term perspective is used in relation to the color of a picture it refers to the diminishing tints or shades of the picture. Aerial perspective as this is cor-

rectly called, is of great value to landscape artists, enabling them to secure effects of atmosphere and distance, but it is a different term than linear perspective.

A good test for curved objects is as follows:

Hold a glass cup at arm's length in front of you. Note that when the top is at a level with your eye that it appears as a straight line.

Curved Objects: Raise it a little, and immediately the top arches slightly downward increasing in curvature the higher it is raised. When the bottom of the glass reaches the level of the eye it appears as a straight line. It will be found that the curves change when the glass is lowered below the level of the eye so that the top and bottom curves never appear parallel.

Perspective Principles: By observation we can make the following deductions:

1. That a line can never appear longer in perspective than it really is, but may appear shorter.
2. That we see more objects or subjects in their perspective form than in their true shapes.
3. All parallel lines receding from the eye, appear to converge.
4. These receding lines appear to incline toward the level of the eye.
5. This level, or horizon line, is in perspective work, an imaginary line.
6. The farther of two parallel lines always appears shorter than the nearer one, owing to the convergence of receding lines.

How Our Position Affects Perspective: If we stand in the middle of a road which extends before us for some distance, we notice the wagon tracks recede directly in front of us. The fence and edges of the roads, as well as the poles and receding lines of the house seem to meet at this point also.

If we step to one side of the road, every line at once changes its direction. We can see more of the front of the house, and while all lines still meet at a point opposite our eye, this point is more to the right on the horizon line.

Thus we know that the lines, though changed in direction, still converge on the horizon.

All Objects Require Perspective: Do not think that perspective affects only straight formed objects. Every object, even cows and automobiles must be drawn in perspective when not absolutely opposite the eye.

Imagine the object as a series of blocks and draw these blocks in perspective. This will show how the lines of perspective under-lie all drawing.

We find in perspective that while objects appear to diminish in height as they go into the distance, that the distance between objects also appears to decrease. This distance diminishes at a proportionate ratio.

Parallel and Angular Perspective: We also find that parallel lines slanting upward, such as the roof of a house, converge at points above the horizon. Downward lines will converge at points below the horizon.

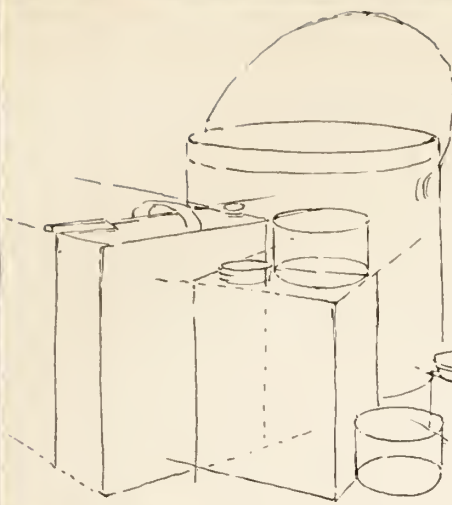
There are two kinds of linear perspective, parallel and angular perspective. Parallel perspective occurs when the object faces the observer squarely.

Angular perspective occurs when the object is turned so that the corner is nearest to us, causing the two sides to recede from us. One side may recede more than the other because it is turned away at a greater angle. (See Plate 9—B)

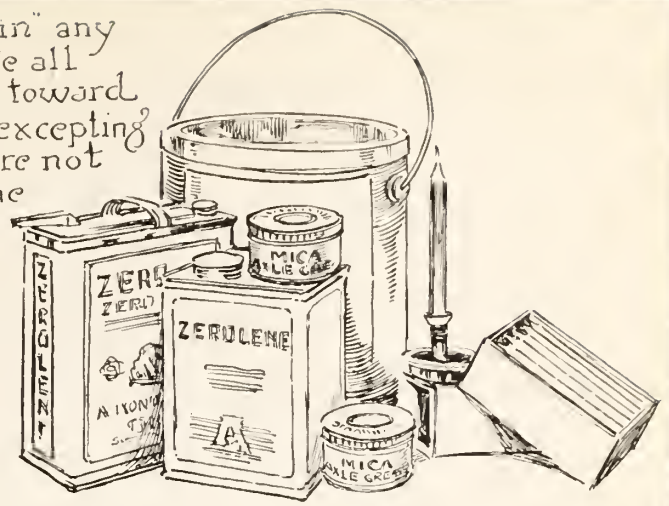
Value of Perspective: Architects and draughtsmen always study perspective thoroughly as it is necessary in their profession. In the notes here the aim will be to present enough working instructions to give a general knowledge so it can be applied in landscape sketching, still life paintings, illustrations, and general work.

If we could always think of our scene or group of objects as being outlined upon a flat surface instead of being solid material, it would be an easier way of studying perspective.

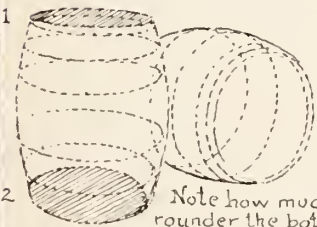
The Picture Plane: Suppose you are sketching an outdoor scene of a house and road. It would be necessary for you to imagine everything on a huge picture plane before you. If you had a surface large enough you could draw it the same size as it appears. As our sketch pads are small, it is necessary to make your deductions to fit this smaller proportion. (See Plate 9—C)



When "blocking in" any objects converge all receding lines toward the eye level, excepting where object are not level (such as the box of candles) These lines converge above the eye level.



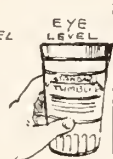
The road, poles and houses all recede toward the horizon, and a change of the observers position to one side changes only the position of these parts, but the lines still recede.



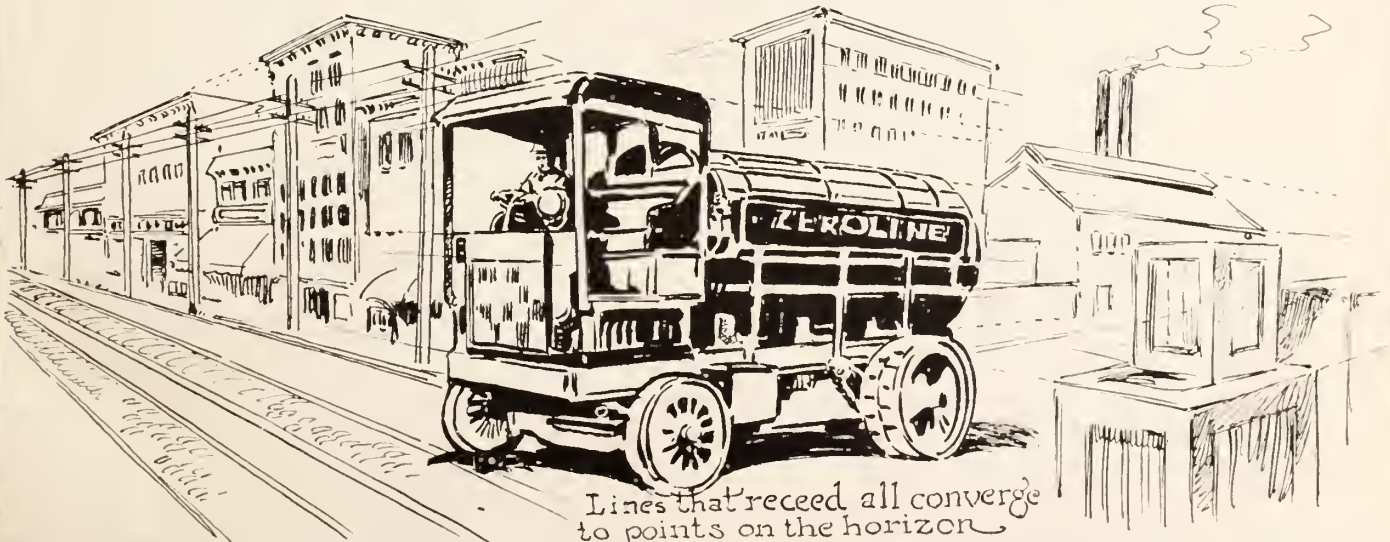
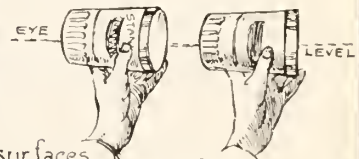
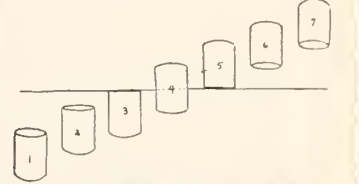
Surfaces 1 and 2 are round but 1 appears narrower because closer to the eye level.



Test with a string the converging lines



Curved surfaces appear straight when level with the eye or when directly opposite the eye.



Lines that recede all converge to points on the horizon

Figure 1 shows the sketch as you make it. Figure 2 shows the relative positions of you and the subject, and some of the terms used in perspective. Figure 3 gives all the terms used in perspective and their location, and also shows how an architect would make a perspective drawing from the plan and elevation of the house.

People In Perspective: When drawing people on a street or in other views, remember that they are also controlled by the laws of perspective. Human figures, with hats, can be considered as six feet high. If a line is drawn in the foreground to represent this height then it can be receded into the distance, and whenever a figure is to be drawn it can be compared with this height.

This will avoid the mistake so often made of having giants in the distance, or pigmies in the foreground.

In the study of Perspective there are various terms used by Artists and Architects.

Horizon Line: When we speak of the Horizon Line, we refer to an imaginary line always at a level with the eye. Sometimes if there are trees, hills or buildings in the way, this line will not be visible.

Vanishing Point: The Vanishing Point, is a point where all parallel lines in a picture appear to vanish. In the simpler kinds of Perspective, this Vanishing Point is located on the Horizon Line.

Point of Sight: The Point of Sight is a point opposite the observer's eye on the Horizon Line. This point is also called the Point of Vision and the Center of Vision.

The Point of Sight differs from the Vanishing Point in that in Angular Perspective the Vanishing Point may be on one side of the Point of Sight.

In Parallel Perspective the Point of Sight is also the Vanishing Point.

Base Line: The Base Line or Ground Line is a line parallel to the Horizon Line and upon which the object rests. In drawings made to scale the measurements are marked upon the Base Line.

Picture Plane: The Picture Plane is an imaginary frame or plane resting upon the Base Line. The Horizon Line crosses this plane at the height of the observer's eye. Imagine that threads are attached to the points of the objects, and focused to the eye. Where these threads pass

through the Picture Plane, they would establish points for the drawing of the subject on the Picture Plane.

Line of Sight: The Line of Sight is the line in Perspective running from the Point of Sight to the Station Point. This line is always at right angles to the Horizon Line and should be drawn fully as long as the Base Line or the width of the Picture. If it is drawn any shorter it will indicate the observer as being so near to the object as to be near sighted, giving the drawing a very sharp-angled Perspective.

Station Point: The Station Point indicates where the observer stands. This point is only used to establish the Vanishing and Distance Points. This point should be indicated at a distance from the Horizon Line equal to the width of the picture.

This insures an optic angle of 60° , which is a proper angle for sketching objects.

Distance Points: The Distance Points are points on the Horizon Line to which lines are drawn from measurements on the Base Line. Where these lines cut across or intersect the converging lines of the object, they indicate where the desired point in measurement will fall.

How Obtained: Distance Points are secured by placing a compass on one of the Vanishing Points and drawing an arc until it cuts the Horizon Line. This is also done on the opposite Vanishing Point and the points of intersection thus obtained are used as Distance Points. (See Fig. 4, Plate C.)

Parallel Perspective: In Parallel Perspective the Distance Point and the Station Point are the same distance from the Point of Sight.

Oblique Perspective: Oblique Perspective is where lines slanting up or down recede to points of their own. It is only when lines or faces of objects are absolutely level or that the upright sides of objects rest on a level that they converge to points on the Horizon.

A book tilted upward or the slanting roof of a house will converge to points above the Horizon. These points are elongated perpendicularly above the Vanishing Point if the book or roof is at the same angle as its other parts. (See Plate 9B)

Slanting Lines in Perspective: Every time a road or an object differs in position from being at right angles to the observer it vanishes

to a point of its own. Or if roads or objects are at different grades or objects are at different grades or slants they recede to different points.

A road that is level will converge at a point above the Horizon. If a road turns to the left and right as well as going uphill and downhill, then each section which goes in a different direction has a Vanishing Point of its own. Any wagon, automobile, house, etc., on that particular road section will converge accordingly.

Geometric Methods: We find that geometric measurements used perspectively will secure the same results. For instance, we know that oblique lines drawn across a square from corner to corner will establish the center of the square at their point of intersection.

Thus a square in Perspective, while no longer a square in actual form can have its Perspective center established by the same rule as shown in the working plate.

If we wish to draw a pyramid or roof top we would secure the points by the use of this Perspective center.

We know that circles can be bounded by squares. The easiest way for us to draw circles in Perspective is to think of them as squares first, and draw the squares in Perspective and then draw the curves in accordance to the square.

How Buildings are Drawn: Suppose that we are to draw a skyscraper from the window in a building across the street. We would first draw an upright line indicating the Line of Height. Next we draw the Horizon Line equal to the level of our eye, and at right angles with the Line of Height. On this Line of Height we would make the stories and draw lines converging from these marks to the Horizontal Line.

If there were a tall round tank to be drawn next to this we would use the same principles, for we find that the lines that come on a level with our eye would be straight. Those nearest the Horizon Line would curve the least, and those parts farthest above or below the Horizon would curve the greatest. (See Plate 9B)

Reflections: Reflections of objects are generally supposed to be exact reverse repetition of the object reflected. By observation you will find that due to Perspective, parts invisible to the eye are often made visible in the reflection. This reflection converges toward the Horizon, generally changing its form.

Shadows: Shadows are also governed by Perspective. They are

considered as an actual substance and their outlines are converged toward the Horizon so as to secure their correct form.

The advantage to the sketch artist of a knowledge of Perspective lies in the ability he soon acquires of drawing his pictures so as to give correct distance and proportion.

Freehand Work: After you have studied the rules and suggestions given here, then you can try sketching groups of objects or landscapes without working out the details mechanically. Sketch in lightly with freehand lines the Horizon, Vanishing Point, and Base Line, and remembering the Perspective principles, block in your subject to conform to these.

In time you will find yourself naturally sketching all your subjects in correct Perspective. The advantage of this ability will be worth a great deal in any branch of Art.

Problems:

1. Arrange a group of objects such as Boxes, Books, Hand Satchels, etc. Indicate their converging lines in Red Ink. On the same sheet try some objects such as a cylindrical Vase, a Drinking Glass, Basket, etc., in positions above and below the Horizon Line. Show the ellipses forming the top and bottom curves in Red Ink.

2. Draw some outdoor scene showing a Road which has turns to the left and right. Show another road with Trees to one side, Telegraph Poles on the other, which extends uphill.

3. Last, make a sketch of some Tall Building, such as an Office Building or Lighthouse. Be careful in these to keep the buildings upright and the windows decreasing correctly in size.

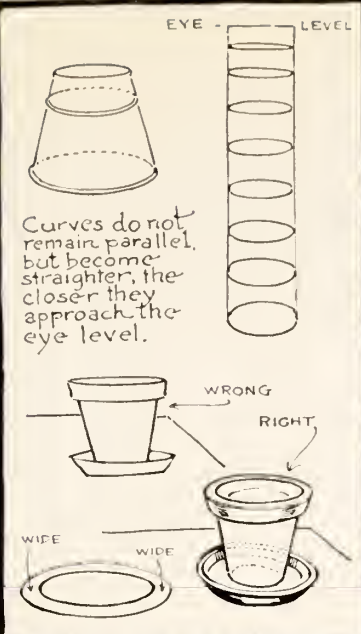
Suggestions—Problem 1: 1. Fruit Boxes. 2. Suit Case. 3. Three or Four Books, one opened flat. 4. Work Basket. 5. Sugar Bowl. 6. A Cup and Saucer. 7. Jelly Glass with Spoon in it. 8. Loaf of Bread, partly cut. 9. Kitchen Table. 10. Lunch Box.

4. Sketch some simple Street in your Neighborhood. 2. A Country Lane with a Fence along one side. 3. A River with Boats on it. 4. A Railroad Track. 5. A Mountain Road. 6. Some Tall Buildings. 7. A Lighthouse. 8. A Gas Tank. 9. A Circus Tent. 10. A Street Corner, showing a Building, Sidewalks, People and a Street Car.

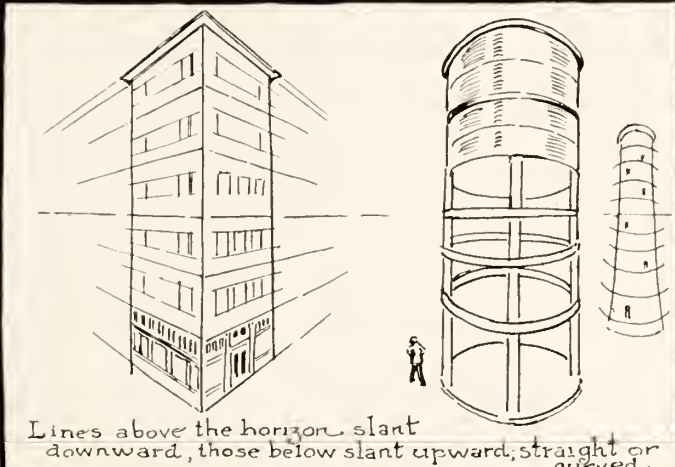
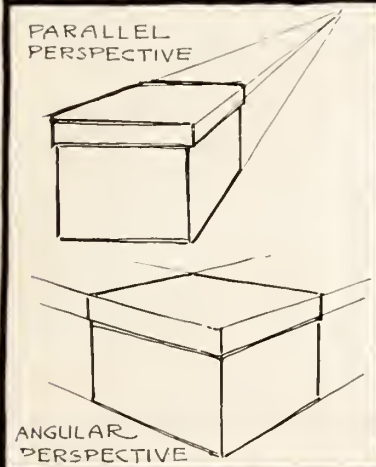
All these problems may be sketched with a Soft Pencil on Charcoal Paper, or outlined in Black Ink. Show very little, if any, shading.



Good Perspective. Note how the lines recede toward a common point.



Poorly Drawn
No Perspective Lines all wrong as they do not converge correctly



Lines above the horizon slant downward, those below slant upward, straight or curved.

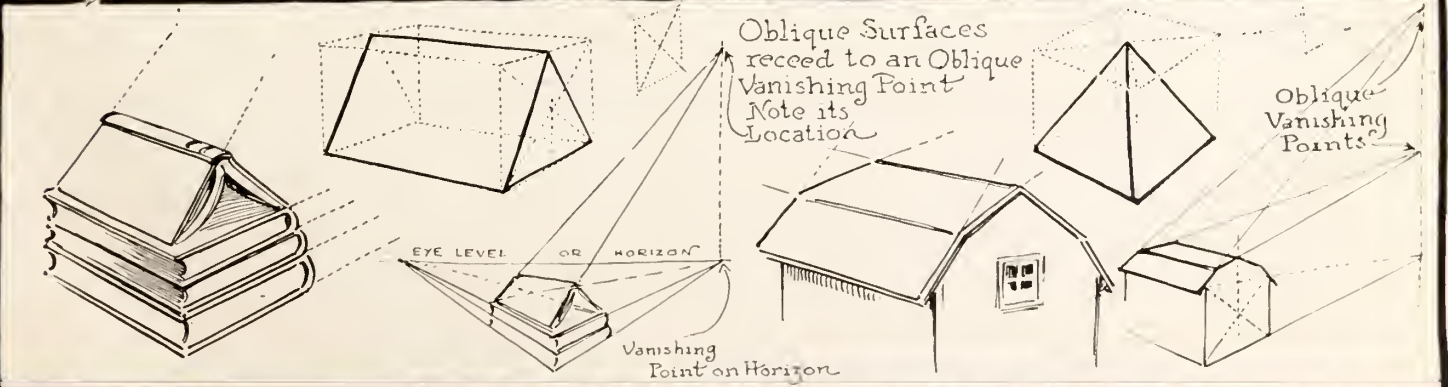
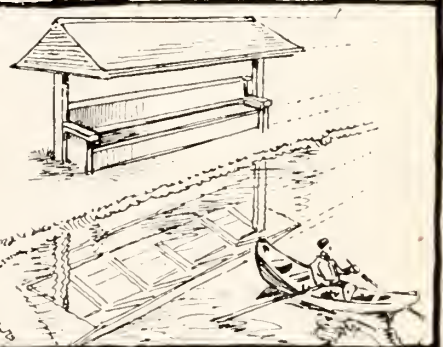
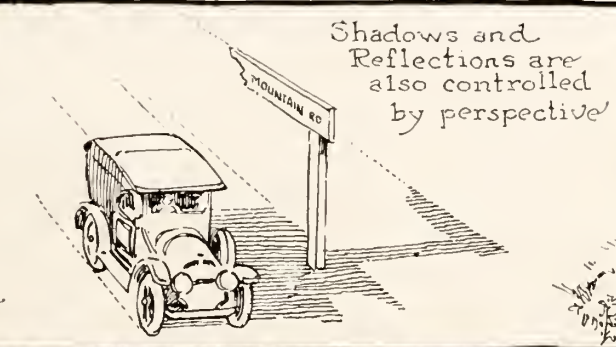
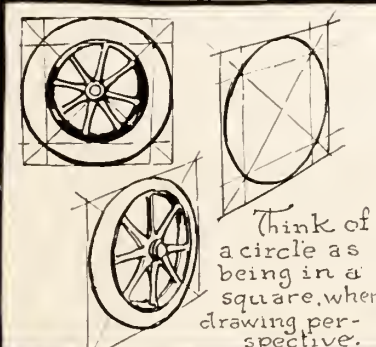
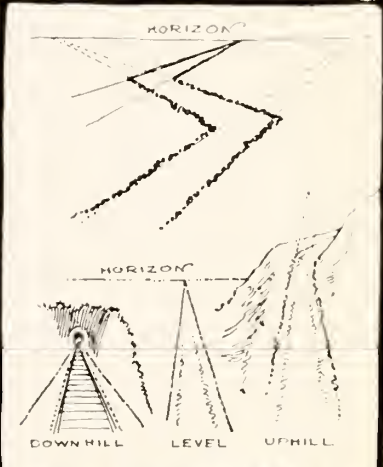




Fig 1

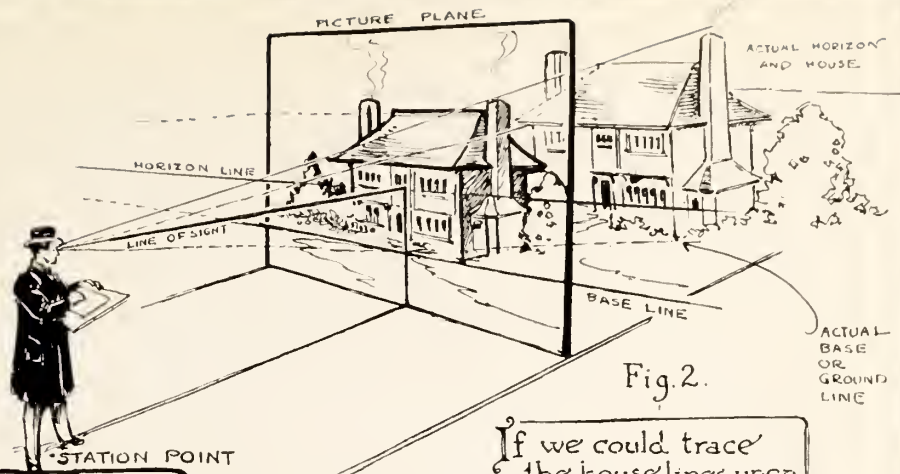
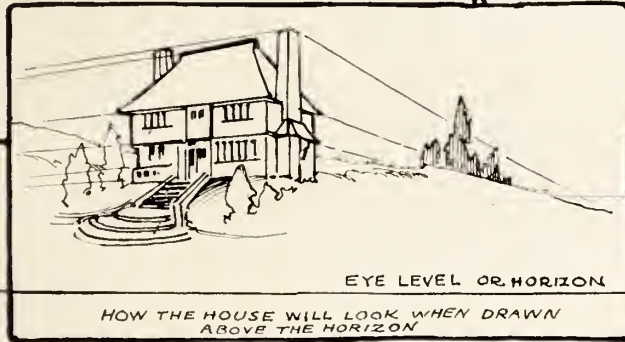


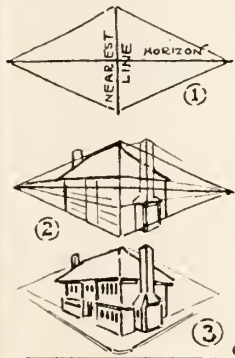
Fig 2.

If we could trace the house lines upon a large glass, we would find that they appear to gradually converge



HOW TO MAKE A PERSPECTIVE DRAWING from a PLAN and ELEVATIONS

FREEHAND SKETCH



These lines converge toward the STATION POINT. Where they intersect the PICTURE PLANE LINE, points are secured for vertical perspective measurements

Lines A-B are right angles to each other and are parallel to two sides of the plan; and meet at the STATION POINT

The elevations furnish horizontal measurements which are carried over to the LINE OF SIGHT and then receded to the VANISHING POINTS

SIDE ELEVATIONS

THIS IS A METHOD OF SECURING MEASUREMENTS WITHOUT USING A PLAN IN THE DRAWING

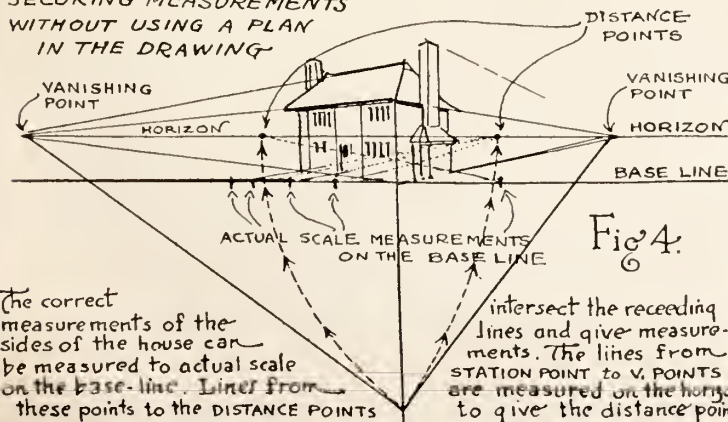


Fig 4.

The correct measurements of the sides of the house can be measured to actual scale on the base line. Lines from these points to the DISTANCE POINTS

intersect the receding lines and give measurements. The lines from STATION POINT to V. POINTS are measured on the horizon to give the distance points

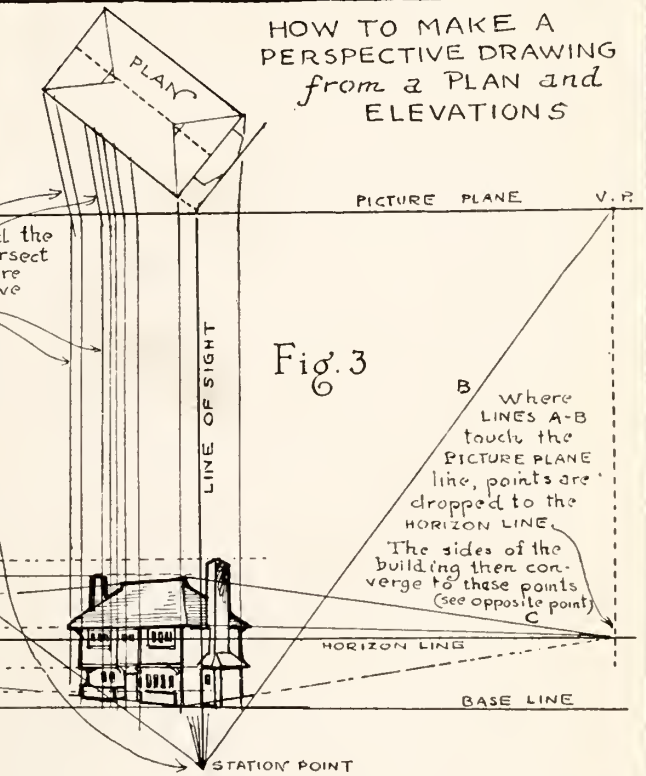
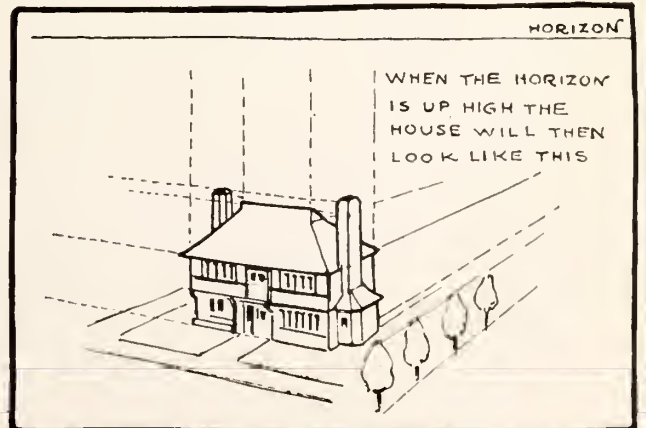


Fig 3

Where LINES A-B touch the PICTURE PLANE line, points are dropped to the HORIZON LINE. The sides of the building then converge to these points (see opposite point C)



PEDRO-J. LEMOS

Chapter XI

COMPOSITION

IT is a lamentable fact, that many artists who draw well do not know much about Composition.

By Composition we mean the proper arrangement of our sketches or paintings so that the subject treated brings out the idea we wish to express, and does so in a pleasing manner.

Good Composition: It is one thing to be able to draw a figure or an object well, but this ability will seldom be of much benefit unless we can place these in our picture so that the completed results are harmonious.

So necessary is Composition that all Art Schools of any merit conduct classes in its study when the fundamental principles of good pictures are taught.

Some people unconsciously have a natural ability to compose or arrange their subjects well, while others find it difficult work. It is for these last named that the ideas noted here will be of most benefit. In all cases remember that these are not hard and fast rules, but ones which should be kept in mind, to prevent obvious mistakes.

Studying the Old Masters: A study of any of the works of the old masters will soon show that all of the paintings considered as master-pieces have a carefully thought out plan or composition. In fact, if you were to make a sketch of the main lines of direction found in the work of such men as Whistler, Turner, and Rembrandt you would be surprised at the number of fine suggestions you would obtain from them.

In the chapter on Action Figures we studied something about Optical Illusions. In a way we find the study of Composition related to this. We cannot explain just why certain arrangements of lines or areas should produce certain effects on our eyes, but experience has proven this.

Beginning A Composition: Suppose, now, you made a sketch of a lemonade pitcher and wished to add more material to it to make up

a more complete study. Some one suggests that you put in a few cookies, an apple on a plate and a table knife.

The first question which naturally comes to your mind is how shall I arrange these so as to show in a pleasing way the idea of a little summer luncheon. Immediately your knowledge of composition must be brought into service.

Poor Composition: We find that it is at this point that so many beginners become confused. Time after time sketches are handed in with every item in the drawing carefully placed so as not to touch any of the others, as though they all wanted to be in the picture, but had nothing to do with one another.

Sketches of this kind are always poor, as they lack Unity. Each part attracts the attention of the observer separately, resulting in confusion.

Composition and Action Figures: So we find that it is necessary to have some basic principles with which to work when planning a picture arrangement. It is a good idea to think of the composition lines of our picture just as we do of the skeleton or action lines when making a figure so that the effect will be pleasing.

In the first place we find that the Laws of Composition in drawing and painting are similiar to the laws of Composition found in other fields. They are all governed by principles, one of the chief of which is the Point of Interest.

Point of Interest: By the Point of Interest we mean the main idea or topic which we wish to express in our picture. All other accessories or parts of the picture, design, or advertisement should play "second fiddle" to that which the artist desires should be brought to the attention of the observer.

While it may be the Point of Interest, it does not mean that the particular object should be placed on the center of the picture. In fact, it is better composition when it is not.

Rules of Composition: To make the rules of Composition easier to remember we shall state some of them briefly below.

1. Avoid equal divisions of space. Do not divide your picture into two equal divisions either horizontally or vertically. It is always better to have this dividing line to one side of the center. If it is a tree, it will

look better either to the left or right of the center. If the horizon line is shown it is better if placed either above or below the center of your picture.

2. Avoid monotony. Two or three equal spaces in a picture have a tendency to detract from each other and produce monotony and lack of interest. Variety of spaces gives interest and is more artistic.

This working for variety is known in Design and Illustration as Variation. Variation creates interest in Music and Literature as well as in Art.

3. Work for simplicity. Do not cut your Composition up so much that its main structural lines are weak. Remember that the pictorial composition which leaves room for thought is better than one in which every detail and object has been so delineated that the eye wearies of the monotony.

Modern illustrators are realizing this more than ever and we find artists like Coles Phillips who have worked out this idea with splendid results.

Remember, however, that simplicity does not mean crudeness. Every line in a strong composition must count, and should be founded on a sound knowledge of construction.

4. Unity is a fourth necessary principle. Many pictures are faulty in that **too much** has been used in the composition. A sketch or painting can often be improved by eliminating some of the subordinate parts or by cutting down part of its outer background.

In still life groups, the arranging of the objects so that they overlap each other a little will help "tie" the picture together and maintain its Unity.

5. Balance is another principle, and one upon which good composition is dependent. This balance is the natural result of the desire of the eye for something which shall keep the strength or weight of the picture more or less evenly distributed.

If figures or objects of any size, dark in tone, or brilliant in color, are used at one side of a space, we naturally feel that a mass or spot similar in quality should oppose or counterbalance it on the opposite side. This balancing unit may be placed vertically or horizontally or in

an oblique direction from the first mass. Where it is located depends entirely upon the position of the first mass on the picture.

Freedom: In working for Balance we should avoid stiff effects. Work for freedom, but always remember that your picture should not appear to be sliding off to one side or over one edge.

In all compositions the direction of the main lines used will have a great deal to do with the observer's first impression of it.

Lines in Composition: If the lines are Straight and Plain the effect will be one of Calmness, as in a country landscape. If the lines run at more or less Varying Angles, then the effect will be one of Motion or Action, as in a Storm at sea, or an Earthquake. If the lines are Curved and Radiating, the effect will be more that of Gracefulness and Rythm, as the growth of a Flower, or the folds of a Dress.

This principle of Radiation is found carried out in some of the greatest paintings. Some artists place the point of Radiation within their picture space, while others often use lines which radiate from a point outside the picture. We find that Turner used this principle of radiation in many of his paintings.

Radiation: In Nature we find many good examples of Radiation. By taking flowers, shells, and insects and studying their markings, we can obtain many unique ideas for use in Compositions.

Remember at the beginning that it is always best to plan Compositions which do not have lines running in too many directions. Keep the lines simple and harmonious, and related in some way to the Point of Interest.

Use of Finders: In sketching from Nature, artists often use what is known as a Finder, which is a cardboard frame of some appropriate proportion, such as 6 x 9 inches. This frame should be of a dark gray or black board, and is held up before the eye and moved about until the space enclosed by it presents to the artist some pleasing arrangement in the landscape before him.

The value of such a simple arrangement is surprising in its tendency to cut out the neighboring part of the view which may be confusing.

Reducing Glass: Landscape artists often use a Reducing Glass to determine pleasing arrangements of the scene they wish to paint. A rectangular space on the glass, surrounded with dark paper, pasted to form a frame, makes a good finder on the lens.

Designers are often called upon in publishing and decorative work to take the same subject and rearrange it so as to compose well into spaces, which vary in proportion. If the rules given above are kept in mind, pleasing and correct results can be obtained in this work. Note in the Illustration sheet how this may be done.

The principle of good Composition cannot be too strongly advised. Many an advertisement is wasted money because good "copy" and illustration are either too crowded or poorly arranged.

Arranging a Composition: A good way to study the rules of composition is to arrange a still life group composed of such arrangements as a Candle, a Pair of Glasses, and a Book; or a Loaf of Bread, a Knife, and a Cup and Saucer. Plan these out so as to make a good arrangement, keeping the most important item such as the Book or the Bread where it will be the Point of Interest.

Problems

1. Sketch this group on a sheet of paper about 10x15 inches in size. After you have done this take some card board strips and try to find with it three good compositions in the sketch you have just made. When these have been located, take a piece of tissue paper and trace these compositions onto another sheet. Finish these up in pencil or with a brush and ink.

2. After you have done this try more difficult arrangements. Later work the same plan with a landscape. In time your eye will become trained to see good compositions quickly in the scenes around you.

Later on we will find where these ideas of Composition can be combined with the three planes found in landscapes, to be used in finished pictures.

Suggestions: 1. Market Basket with some Vegetables inside and scattered around it. 2. A Hat, Rubbers, and an Umbrella. 3. A collection of Cooking Utensils. 4. Some Earthenware Jugs and Potted Plants. 5. A Vase of Flowers and some Books. 6. A winding Road, some Trees, and an Old House.



After making a sketch from nature, with the aid of finders see how many smaller compositions you can find on your sketch.



These have been taken from the larger drawing

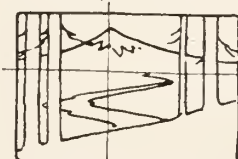


Four Compositions of the same subject arranged within different spaces

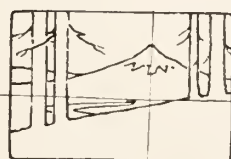
Do not draw the horizon line in the middle of your picture and avoid



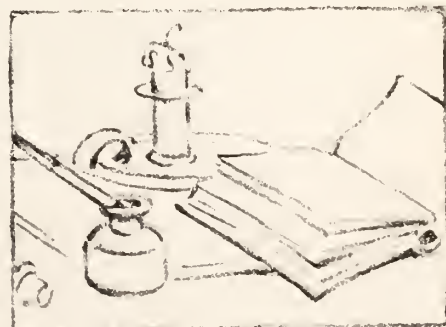
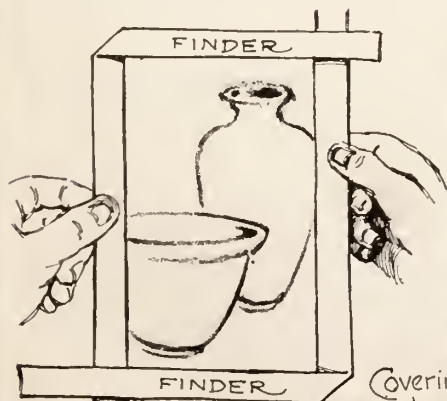
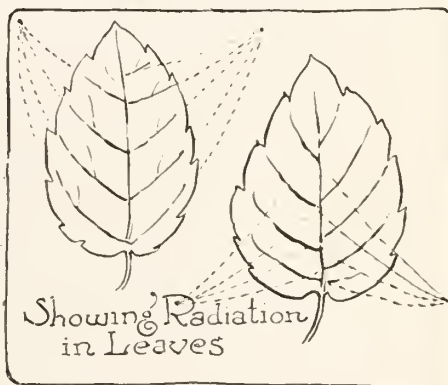
placing any point of interest in the center



The horizon line is best above or below



the middle and arrange the point of interest on one side of the center



Covering parts of your drawing with 'finders' will often leave a better picture than when all parts are showing. A line around the edge, erasing all parts outside the line will give you a good arrangement.

Chapter XII

THE USE OF DESIGN

AFTER we have learned to sketch fairly well from objects around us, our next step is to compose or arrange these objects into pleasing groups.

If we learn to do these things well we have made good progress in our Art study. But the mere drawing and composing of our work only brings us to a position where we can begin to assert our own individuality.

It is in the field of Design that we find our greatest opportunities for our ideas. Many of us think of Design as connected with Mechanical Drawing, and not in any way connected with real Art. This idea is an erroneous one, as we find that the study and use of Design affords us one of our highest means of Art expression.

Design in Applied Art: If it were not for Design we would not be surrounded by various types of artistic furniture, majestic buildings, beautiful rugs, etc. These things and many others are all the results of the artistic ideas of Designers.

Everything artistic which we see around us has first gone through the hands of a Designer, before the working plans were made for its construction.

The immense sky-scrapers erected in large cities are designed by architects who have made years of study of the most beautiful and practical of the classic buildings of the past. The furniture we use every day has been designed by men who have worked up ideas based on the most artistic productions of the Greeks and Romans.

The beautiful rugs we see in many homes are the work of patient Designers who have combined conventional or possibly symbolic ornaments into a pleasing and harmonious pattern.

French Design: The French people, so long leaders of Fashion, have men and women renowned as Designers of artistic hats and gowns. In all these cases the artists have profited by the mistakes or successes

of those before them, and have sought to do still better work.

In many cases they have abandoned entirely past examples and have drawn their inspiration from natural sources, such as plants and flowers.

Design in Nature: This last idea is a very good one, as we find that Nature is the source of all that is best in ornament. Students who are worrying about some way of obtaining ideas to help them in Designing need only to turn to Nature. Here in the birds, insects, plants, rocks, shells, and flowers he will find innumerable suggestions for the best designs.

As an example of this we might mention the ancient Egyptians who evolved their Lotus Design from the plant which grew in Egypt; or the Roman Acanthus based on the leaves of the Acanthus plant.

In studying Design, we shall divide it into several classes.

1st. **Constructive Design:** such as is used in designing Automobiles, Buildings or Furniture. In these the general effect and practicability of the article as a whole must be chiefly considered.

2nd. **Structural Design,** in which ornaments are planned for the decoration of objects which are to be constructed, such as the Classic Pillars in Public Buildings, Decorative Panels for Interiors, Rugs and Textiles for Interior Decoration, or Designs for Jewelry, etc.

3rd. **Pictorial Design,** such as is found in Book Illustrations, Poster Designs, or Decorative Landscapes.

These three present a distinct field in which many kinds of artistic work may be executed. The last named comes closest to what we have studied so far. The first named is the most closely allied to Mechanical and Architectural work, while the second class is the kind of Design which we shall try to explain more fully in this lesson.

Sound and Ornament: Scientists have found that sound is in some way closely connected with ornament. Margaret Watts Hughes tried the experiment of reproducing the tones of various singers upon the bowl of a pipe covered with a sensitive powder.

The photographs of the results are particularly interesting on account of their close resemblance to the forms found in sea-shells, ferns, flowers and growing trees.

Musical Experiments: These results were obtained directly by the effect of musical vibrations sung down the pipe stem and affecting the particles of powder, moving them upon the sensitive membrane across the pipe bowl. Each of these beautiful formations appeared in response to some different quality or pitch of the singer's voice. It was found that the same note when sung by a man and a woman, produced a different design.

Design is controlled like Music by a number of rules or principles, the violation of which will cause discord.

Adaptability of Designs: The most important of these rules is that the plant, flower, animal form or other object we use should **never** be drawn in its **natural** form when used as an ornament. The ornament should always be adapted to the surfaces which it is to decorate. It should also be arranged to be practical for the medium which is to carry the design.

Designs for Various Surfaces: For instance, a Design to be used on Stained Glass would have to be planned entirely differently than one which is to be used on a woven Rug. In the Stained Glass Design the artist must take into consideration the craftman's limitations in cutting and soldering the glass. In the Textile Design he plans a geometric arrangement adapted to the mechanical restrictions of the weaver's loom.

And so we shall find that the secret of Design is the law that the design must conform with the article for which it is intended.

We find that all good ornaments form an appropriate part of their surroundings. If an ornament or a border **stands apart** or appears to be of a **different style** than the rest of the matter it accompanies, then it is **not good design**.

"Life Like" Designs: In the past and even today the idea persists among some people that the more natural or "life like" a design appears the better it is. Beginners often try hard in planning an ornament for a vase or rug to make it "stand right out." This idea is not correct and is without doubt bad taste in design.

Never paint natural flowers on vases or table ware, or use salad dishes covered with realistic pictures of lobsters, crabs, etc.

Bad Design: Rugs and wall papers covered with immense roses or animals shaded to stand in relief are more and more recognized as bad taste in design.

Note in the working plate the correct and incorrect application of a flower and butterfly motive.

Design Composition: Suppose we wish to work out some designs based on a sketch we have made from a Butterfly. The first thing we must find out, is the purpose for which it is intended. Is it to go on Metal, Wood, Glass or some Fabric? Are there any other ornaments already executed with which it must harmonize?

After we have arrived at some conclusion regarding what is required, we can go ahead and plan our design.

In the first place we find that there are Three Divisions in Design. These three divisions are

Naturalistic Compositions

Conventional Compositions

Geometric or Abstract Compositions

Naturalistic: The Naturalistic Compositions are those which show the subject in its realistic form, but plan it so as to form a pleasing arrangement or design within a certain space. In addition to this, practically no shading or modelling is attempted, everything being in simple flat tones.

This is the idea on which most of the Japanese Art is based. Work properly executed in this manner forms one of the most pleasing ways of making Pictorial Designs.

Conventional: Conventional Compositions are arranged by taking the most typical lines and curves found in the subject and using them in a design of conventional form. Little accidental variations are set aside, and all the details are drawn in a conventional manner.

A common form of Conventional Design is that known as symmetrical or like-sided arrangements. Designs of this kind are found often on Book Covers, in Borders, on Jewelry, China and Metals. In fact, Conventional Designs will be found used in the majority of materials around us.

Geometric: Geometric, or Abstract Designs, employ purely geometric or abstract forms for the most part. Designs of this kind are drawn

in straight lines only, either at right angles to one another, or at an angle of 45 degrees.

This limitation is due to the fact that designs of this kind are generally made for textiles, where the lines must be consistent with the technical requirements of the looms.

“Block Design”: In the last few years there has been brought into popularity a system of Design where all the ornaments are based on squares, rectangles and straight lines. This system, called “Block Design,” has been put into use in many of the European schools.

The effect has been surprising, resulting in a series of designs, simple in construction but strong and pleasing in effect.

The result has been that this block plan has become popular, and at present we find ornaments of this strong geometric type being used in all the most modern work.

Geometric Papers: For the purpose of convenience and accuracy, these Abstract Designs are generally drawn over geometrically squared paper, which can be obtained at any Art store or supply house.

So we find at our command, three classes of Design, all distinctly different, and all good.

The main idea to keep uppermost in all our Design work is that the ornaments we plan must be beautiful and decorative. They should also be in harmony with whatever they accompany and never detract from the rest of the design.

Ornateness: Remember that ornateness is not decoration. Spaces filled with a great deal of “filagree” or a “gingerbread border” are not good works of Art merely because of the amount of work in them.

A good way to become efficient in Designing is to take some fairly simple subject, but one which has enough parts to work out in an interesting manner. After you have chosen your subject, try drawing it in the three various kinds of Designs.

Problems

Select some plant, bird, fruit or animal and make a careful sketch of it just as it appears. Then sketch three rectangles 3x4 inches in size.

In the first one, make a Naturalistic Design from your subject. In the second, draw a Conventional Design. In the last rule off little squares $\frac{1}{4}$ of an inch across and over these plan your Geometric Design.

Suggestions: 1. Holly Berries and Leaves. 2. Easter Lilies. 3. A Butterfly or possibly several. 4. Dragon Flies. 5. Peacocks. 6. Blue Birds. 7. Beetles. 8. Owls. 9. Dogs or Cats. 10. Pine Cones and Leaves.

Chapter XIII

THE APPLICATION OF DESIGN

AFTER we have made a study of the various subjects around us, we shall find many ways in which we can put this knowledge to practical use.

It is natural for man to wish, for symbolic or artistic reasons, to decorate or ornament the objects which surround him. In the early days of history the primitive men embellished their tools and walls with crude ornaments. Today great industries employ thousands of workers to decorate the various products manufactured by them.

Design in the Industries: In the objects around us are to be found ornaments of all classes applied to all manner of surfaces. It is only necessary to observe the many objects and materials in our own rooms to realize how largely the design of forms, and patterns has entered into our industries.

It is true that much of this ornament is poor and in many cases would have been better if left out, but this is the fault of the Designer rather than the manufacturer. Too often we have ornament used in all kinds of impossible places by men who forget the true use of Applied Design.

This is chiefly due to the spirit of commercialism which considers financial returns at the expense of good Art.

Early Craftsmen: In the work of earlier centuries we see many things produced by craftsmen in all lines, who put devotion into their work. Time then was no object, and the blacksmith and the painter were both artisan and artist.

Durable materials were used and careful attention was given to the perfect completion of all details. The Greeks, who have left us so much that was ideal in Art, gave as much attention to the carvings in dark portions of a building as elsewhere, for they said, "The Gods see everywhere."

Early Design: When we go back in the history of Design we find many valuable inspirations from the work of the ancients. Even in

the Barbaric Designs are motifs that can be used successfully at the present time. A good illustration is that of the Swastika which is found to have existed hundreds of years ago in Ancient India, Bactria (East Turkestan) and Asia.

From the Egyptians we have many splendid examples of conventional ornaments. From them we have the much-used Winged Disk, symbolic of the sun in its beneficence. The Scarabaeus or Sacred Beetle was also identified with the rising sun, and typified resurrection or evolution. Then we have the Lotus Ornament, representative of the annual procession of the seasons, and the return of life.

Egyptian Design: Egyptian ornament is worthy of study as it is typical of good Design. The Egyptian artist never destroyed the consistency of his conventional designs by too close an imitation of the naturalistic.

The Egyptian artist derived all of his design ideas directly from Nature, and held consistently to them.

Greek Design: From the Greeks we have the Greek Lily sometimes called the Greek Honeysuckle. This was a graceful symmetrical ornament somewhat similar to the Egyptian Lotus.

The Anthemion is also a characteristic Greek form. It is a perfect example of the correct distribution of areas, and a splendid example of radiation.

Its origin can be traced back to Lotus, but the calyx and petals are used in a different proportion. The flower ornament is enclosed by a continuous sweeping outline. The Anthemion was used extensively by the Greeks in their pottery designs.

Then we have the Greek Fret developed from the Egyptian wave design. This simple straight border ornament is used a great deal at the present time in buildings.

Another ornament, called the Egg and Dart, was used by the Greeks. It is also a border, and is so called because of the alternate Egg and Dart shapes found in its design.

Ideal Motives: The Greeks are responsible for much that is best in our Design at the present time, although the number of types used by them were not many. Their Art in Ornament was almost perfect.

While Roman Ornament is often used today, its standard was not

as high as that of the Greeks. In fact, it was largely a copy of Greek ideas tinged by Roman decadence.

Roman Ornament: We generally associate this Design with the Roman Acanthus, used so much by them in all their Architecture.

This ornament was based on the Acanthus Leaf which lent itself readily to conventional forms.

After the Roman we come to the Gothic which was a beautiful type influenced by the religious fervor of the people during its conception. Its best examples are all associated with religious ornament of some kind.

Gothic Design: From the Gothic we have the Trefoil, Quatrefoil and Cinquefoil Ornaments shown in the Illustration sheet. The Gothic Round and Perpendicular arches, used so much in church buildings at the present time belong to this period.

After the Gothic, we have the Renaissance Design, which was quite different from its predecessor. This period of Renaissance or revival was one in which the Arts flourished.

Designs of many kinds, both good and bad, were originated. Many of these, in a modified form, are used today.

Renaissance Designs: Expensive materials were used incorporating designs with shells, birds, animals, figures and crests. These were combined with an elaborate system of scroll work, sometimes carved in woods or stuccoed onto walls and ceilings.

The general tendency was toward luxury and display. This when kept in place, was not bad, but in some cases developed into phases of art known as the Baroque in Italy and the Rococo in France. These two types of Art were corrupted Renaissance and are typical of Design carried to excess.

Georgian and Empire Designs: From the Renaissance sprang other developments or offshoots such as the Georgian in England and the Empire in France. These were both more or less localized modifications of the Design Periods which had gone before them.

Today we have several schools which have attempted to introduce a typical style of Design. Most of them, when studied, will be found to be based on the Classic Art of the Ancients.

Any Design which is based on simplicity and beauty of line and form

is a step in the right direction. For this reason, you can not do better than to study the Greek examples.

William Morris: William Morris, influenced by the teachings of Ruskin, formed about 1860 a firm of artists composed of Rossetti, Burne-Jones, and others who gave their attention to the artistic improvement of all furnishings.

The firm was very successful, revolutionizing the taste of the period, and this influence still exists. Morris' teaching was summed up in the statement, "Have nothing in your home that you do not know to be useful or believe to be beautiful."

So if we will study the examples of all good ornament that has been used in the past, and make use of the rules found in the previous lesson, we shall soon find ourselves able to originate ornaments that are both practical and beautiful.

You must always make it a point to familiarize yourself with the use for which your design is intended.

The Subject or Motive for the Design may be selected from any source. The motive should always be harmonious with the subject matter which the motive will decorate.

Repetition: One of the easiest methods of making a good Design is to take some very simple form and use it by means of Repetition. Very simple objects can in this way be made interesting. Even cogs and parts of machinery, if arranged properly, can become decorative.

Rhythm: Rhythm may be produced by the Repetition of the same motive at regular intervals. Variation from this can be obtained by altering the position, shape or size of the motive at these regular intervals.

Again Rhythm may be produced by a flowing, continuous line which takes graceful directions. This line may be the foundation or main line to which other design motives are attached. In all instances where Rhythm occurs in a Design, it should be a pleasing arrangement which leads the eye easily throughout its length without creating confusion.

Symmetrical arrangement of objects creates decoration. The more rhythmic this symmetry the more pleasing the design will be.

Simplicity: Simplicity is the great need of Design. Many Designers elaborate so much that the design becomes ornate.

If you are drawing a Design and find that some part is disturbing or does not satisfy you, try "subtraction" instead of "addition." Eliminate a portion all together, if disturbing, and possibly by enlarging neighboring details, the fault will be eliminated.

Design Rules: A few good rules to remember in Designing are given below.

1. Do not use too many different forms.
2. Avoid using lines which create too many different angles.
3. Have but few lines crossing each other.
4. Do not make all parts alike in size, but vary them.
5. Avoid making the motives too large or too small for the space they occupy.
6. Keep all parts of a Design related or belonging to the same "family." Relate the design to the space or object being ornamented.
7. Avoid complicated forms. Design graceful contours to the motives or units used in a Design.

Advertising Design: We find ornaments used a great deal in Advertising Design. These may be a border design around the page; the subject of the advertisement; or a single ornament to balance some part of the design.

In Advertisements or other work containing Lettering, the Ornaments and Lettering should always be harmonious in style. If the Lettering is very heavy and massive, the ornament or border should be composed of the same kind of lines. If a light fanciful Script letter is used, the Design should be in the same spirit, and light lines used in its execution.

Borders: In planning borders, they should be drawn of sufficient width or weight to enclose firmly the reading matter. The border should never appear either weak or so massive as to be overpowering.

Generally the most difficult part in Border Designs is the problem of arranging a rhythmic or repeating border properly at the corners.

Designing Borders: There are three ways to do this:

1. By continuing the main line of growth, having it turn the corner.
2. By making a square at the corner, and placing a harmonizing motive within this square.
3. By enlarging the corners or extending them beyond the Border. This may be somewhat elaborated, but not overdone.

Problems

1. The application of Design, and the planning of Ornaments cover such a wide range that there are many problems which may be worked out along this line.

An unusually interesting, but very practical problem is to take some plant or flower and see how many ornaments of a pleasing shape can be worked out from its various parts. These ornaments need not necessarily be an exact copy of the flower sections as regards shape and size, but should derive their suggestions from it.

These can be sketched and filled in with Charcoal on Charcoal Paper, or in Pencil and finished with a Brush and Ink.

After they have been done in this way, an additional step may be taken by working the ornaments out in various colors. These colors may be filled into an Ink outline with Water color, or with some medium such as colored crayons.

2. A second interesting problem is that of selecting some page of advertisement from a magazine. Cut out the reading matter and illustrations and rearrange them in some pleasing manner, pasting them down in a 5x7 inch space.

Around this matter, leave a proper margin and draw a space for a Border. Within this border space sketch a Border Design that harmonizes with the "ad" it encloses.

This Design should harmonize as regards width, strength of lines, and size of motives. If any object is used in the Border panels or corners, it should be designed in a decorative form and be related to the subject matter.

Complete this Design in pencil, ink, or wash. Do not use any colors. Care should be taken to keep the Border at right angles to the type, and to keep all the sides perfectly square.

Suggestions: For Problem 1, any flowers such as Nasturtiums, Tulips, Anemones, Poppies, Lilies, Roses or Carnations will work out well. Not only the flower, but the buds, leaves, seeds can all be used either entire or in sections.

In Problem 2, it is best to select an "ad" from some standard magazine such as Century, McClure's or Cosmopolitan. Cut away any border which may be around the "ad" and see if you can draw one as good or better. Be careful to keep the paste marks away from your border design.

Chapter XIV

THE ART OF LETTERING

Capital Letters

MANY of us are inclined to associate our Alphabets with something more or less mechanical. This is because of the fact that so much of the lettering we see is in the form of type which has been cast into a mold and printed on a press. As a result of this, many artists have neglected their training as regards Lettering, much to their regret later on.

Value of Lettering: In the average Commercial Art Studio, a large per cent of the work turned out every day contains Lettering in some form or another. This is easily understood when we realize that much of the Art work produced today is for the Advertising field. While a large part of the advertisement may be represented by means of the illustration, the best "ads" are those combining both illustration and "copy".

When type and printing were in their infancy, the mere fact that anything was printed was sufficient to compel attention. But so rapidly has the printing industry advanced, that the use of type alone can no longer be relied upon for results.

Lettering in Advertising: This situation has caused progressive advertisers to demand for their work individual treatment in the lettering as well as in the illustration. As a result we find whole pages of our best advertisements lettered by hand.

Progressive Artists whether in the Commercial field or otherwise, have all come to realize the prime importance of Lettering, and are constantly on the lookout for new ideas in this line.

In addition to the study of Color and Illustration, we find Art Schools and Colleges giving courses in practical Lettering.

Why We Study Past Work: Just as in other phases of Art, we find that we are only able to produce original effects in Lettering after

we have studied that which has been produced in past periods. In doing this we not only obtain a sound basis for our working knowledge, but we find that good letters are one of our highest and most lasting forms of Art.

Away back in ancient Egypt, some 5000 years ago, paleographers find that our Alphabet had its first conception. After the manner of the ancients, the Egyptians sought to record festivals and other occurrences by means of story pictures.

In the hands of the Egyptian priests, these pictures gradually assumed an abbreviated form known as "Hieratic." In time these symbols lost their resemblance to the concrete objects they represented and became connected with sounds.

From the Egyptians these conventional marks fell into the hands of the Phoenicians.

The Phoenicians were a nation of practical merchants and it did not take them long to develop these sound symbols into an alphabet. The direction of their reading and writing, however, was just the reverse of ours.

From the Phoenicians, this alphabet found its way to the Greeks, who changed the direction of the writing from left to right, as it is used at the present time.

Finally the alphabet found its way into Italy, and it was there that it was gradually improved. In the hands of the Romans, about the first century, it reached that classic form which is so far unequalled. This alphabet is still much in use, and is known among Designers as the Classic Roman Alphabet.

The Classic Roman: This alphabet is so beautiful and easily read that it ought to be studied and copied. While it has not been possible to give all the alphabets, you will find in Plate 13 some examples of these letters in the lower half of the page. Up at the top we have also given the modern Roman Letters, used so much by Designers in their work in the last few years.

You will notice that the Roman Letters are a very square, dignified letter. In addition to this, you will find that they are easily read. It is this good combination which has made them last so long.

What Makes A Good Alphabet: In selecting any alphabet for use, or in designing those of your own, always remember that the main re-

quirements of any letters are that they be legible as well as artistic. In addition to this they should always be harmonious with the design or illustration they accompany.

We find that the various standard alphabets are adapted to various uses. An alphabet which would go well with a heavy massive design, might be entirely out of harmony with a delicate illustration.

One of the greatest troubles students have in first trying to letter, is to sketch correctly their varying strokes. For instance, if you will look at the Alphabet on Plate 13 you will notice that the letters are composed of thin and thick parts.

Thin and Thick Strokes: The average person might think that these strokes are thrown in indiscriminately, but such is not the case. There is a systematic rule determining which of these lines should be thick and which thin.

Early Scribes: The early Latin scribes held their reed pens much more vertically than is the tendency of writers at the present time. This practice of holding the pen at right angles to the writing surface caused a down stroke from left to right to produce a wide line. On the other hand, if the pen was carried up in the opposite direction, it resulted in a thin line.

In time the picturesque letters produced by the penmen were also carved in stone by sculptors. The sculptors added to the beauty of the letters by inserting the little cross strokes found at the top and bottom of the letters.

Rules in Lettering: As a result, we have our Classic Roman Letters, used as a standard for good proportion. The following rules will help you to determine their thin and thick strokes.

1. All horizontal lines should be thin.
2. All vertical lines should be thick, except in the N and the first line in the M, which lines originally sloped up from left to right.
3. All lines sloping down from left to right should be thick. This includes the swinging or "swash" lines in the Q and R, and the sloping line in the Z which is a down stroke.

These few rules will give you a basis for the construction of the Roman letters, and most of the other alphabets as well. This is because of the fact that most of the alphabets are derived from the Roman letters.

Standard Alphabets: In studying Alphabets of the past we might divide them, for practical study, into five sections. In addition to the few named here, there are quite a number of others, but none of them important enough to use as models for our work.

We will note them as follows:

1. Classic Roman Alphabet.
2. Uncial Alphabet.
3. Italic Alphabet.
4. Script Alphabet.
5. Gothic Alphabet.

These different Alphabets merge naturally into one another and form a good outline for standard work.

Capitals: In this chapter we shall study only that part of them known as the capitals or Large Letters. In the next chapter we shall study the other section, known as the Small letters of the various alphabets.

This is because of the fact that the Small letters did not come into use until some time after the Capitals were originated.

When learning became more widespread, we find that the "common people" as they were called, used the Roman letters on parchment. In time the rapid writing of these letters with a pen produced a letter based on the Roman, but more round in formation.

Uncial Letters: These rounder letters became known as Uncial letters, and are used in many places at the present time. They are not so angular as the Roman and are good for decorative work. They are especially good as initials in mottoes and post cards.

Italics: The next alphabet we find used was what is known as Italic. Italic letters were first used by a Venetian printer named Manutius Aldus in publishing an edition of Virgil, and were based upon the hand writing of Petrarch the great Italian poet.

They were a slanting letter, slightly narrower than the Roman, and having more free swinging strokes. These Italic letters can be rapidly executed because of their natural slant. They are good to use where space is crowded, or where an accent is desired in a line of advertising.

Script: After the Italic, we have the Script Alphabet. They were also a development from the handwriting of the people. In

many cases they are so similiar to Italic as to be almost indistinguishable.

On observation, you will find that the Script letters are generally a rounder more swinging letter than the Italic, and are more or less connected. In fact, the main characteristics of Script are their roundness and linking of letters.

Script may be slanting or vertical, but letters are only Italic when they slant.

Gothic: The last named letter in our list is the Gothic. This term must not be confused with that sometimes given to square block letters by printers. It refers to the picturesque angular letter used so much in Gothic manuscripts.

If it were not for its lack of legibility, the Gothic would rival the Roman letters in popularity. But the fact that they are often difficult to read, has caused them to be used mainly in places where a religious or decorative effect is desired.

Test Letters: Various types of Gothic letters are known by different names according to their origination, as English Test, German Text and Black letters. The Black letters are a heavy, massive style of Gothic.

In Plate 14 we have given some of these Alphabets for use and comparison. If you will study them you will note that each has its value and individuality.

The same rules governing the Roman letters apply to the Uncial, Italic, Script and Gothic.

For that reason, if we study some of the principles used in lettering Roman, we can apply them to the others.

A Good Rule: In the first place, if you cease to think of the letters as being **letters**, but rather **spots** in a **design** half your battle will be won.

A little practice will soon show you that the **white** space left by the paper **between** the letters is every bit as important as the letters themselves. For this reason we must always think of our letters in their "blocked out" form, as tho we had sketched a line from point to point of their extremities.

Shapes of Letters: When we do this, we find that some letters are square, some round, and some triangular. We must always bear

in mind this general shape of a letter, in placing it on a line. Then if we try to keep the same average area between all the letters in a line, we find that when held at a distance they give the right tone or "spotting."

Never try to obtain results by carefully measuring a set number of inches for each letter regardless of shape or size. The results will be disastrous.

Round Letters: You will also find that the round letters, such as O, G, C, and Q must be drawn a little larger than any square letters in the same line, in order to keep their height with the rest.

For this same reason letters such as V, W and A require that their pointed ends should be extended a little beyond the guide lines so as to appear tall enough.

Width of Letters: Taking a square letter such as N for a measure you will find that the letters M and W should be given from $1\frac{1}{4}$ to $1\frac{1}{2}$ more width than the other letters. The letter I because of its narrowness, should not be given as much space as the other letters.

Plate 13 shows how the curves in such letters as B, R, P, and S should be built on symmetrical curves.

After you have practiced the combining of letters into lines, try a sheet with three or four lines on it. This will call into use your sense of Design, for each letter is nothing more or less than a design motif.

How to Begin: The best way is to sketch lightly with a soft pencil the wording you intend to use. After you have placed its location in a general way on the sheet, take a T square or triangle and rule light guide lines touching the top and bottom of the letters.

A good plan for adjusting a certain number of letters to a line is to put in the first and last letters of the word first, and then fit the others in between these.

Ruled Lines: It is good to rule horizontal and vertical guide lines as an aid in keeping your letters correctly balanced. All your usual work should be inked in freehand, as freehand letters are the most artistic.

First carefully sketch the outline of the letter in pencil. Go over this outline in ink with a Lettering Pen, and then fill this outline in with ink on a small brush or ruling pen. This plan avoids poor edges and filled-in corners on the letters.

Brushes and Pens: Lettering has become such a general Art that several varieties of pens and brushes have been invented for this work. The most practical makes of pens have been sketched in Plate 14. With these Lettering Pens, the thin and thick strokes on Small letters and the outlines of Capital letters can be obtained in firm strong lines. The Prang "Spoonbill Pen" should be in every Artist's Kit.

Modern Letters: In the last few years there has been a widespread movement on the part of Designers for an individual modern type of letter.

Particularly in modern work we find types of Alphabets, new and yet interesting. While some of them break the rules used in the Roman Alphabet regarding the weight of letters, their changes have been carefully considered from a point of Design.

While an innovation, they cannot be called improvements on the Classic, but rather an answer to the general clamor for "something different."

Whether any of the new letters will stand the test of time depends entirely upon how closely they conform to the principles of Design.

It is never good to attempt original adaptations of Alphabets until you are familiar enough with standard letters to be confident of your ability. Remember, it is only good Design which will last.

Problems

Take a sheet of Kid Finish or of Translucent Bristol Board about 8x10 inches. In a strong Roman about $1\frac{1}{8}$ inches high letter the words "Paris Furs." The sheet should run in a vertical direction and these words can be placed one under another in a panel about $1\frac{1}{2}$ inches from the top edge. They should extend so as to leave $1\frac{3}{4}$ inches on each side.

As a subordinate section add in letters about $\frac{3}{4}$ of an inch high, the words "Style, Price, Quality" in three lines. These should be in a panel $2\frac{3}{4}$ inches high, and be placed about 1 inch above the bottom edge of the sheet.

Do not worry too much about mechanical measurements, remembering to keep the spotting of the letters pleasing, above all else. Also remember to keep all the letters in the same line of the same mass or weight. This will produce harmony of balance.

A plain border may be put around the edge.

Suggestions for similar Problems: 1. Take a Cream colored sheet of smooth card about 7x9 and letter the words "Electra Lamps" in letters 1 inch high. Below in Italic letters, "Just Try Them" in letters about $\frac{1}{2}$ inch high.

In the bottom line put "General Electric Co." in letters $\frac{3}{8}$ of an inch high. Use wide simple letters and keep the various sections massed together.

2. On a Brown Card 4x7 inches letter the two words Tahoe Tavern in heavy massive letters about $\frac{5}{8}$ of an inch high. These should run horizontally.

3. On a Gray Card $5\frac{1}{2} \times 7\frac{1}{2}$ sketch in bold letters the words "Calcon Pottery—A unique concrete pottery—San Francisco, Cal." The first two words should be in letters $\frac{3}{4}$ of an inch high on one line. The sub-title should be in three lines of letters each about $\frac{3}{8}$ of an inch high. These may be put in Italics, if desired.

The words "San Francisco, Cal." should be on the last line in letters $\frac{3}{8}$ of an inch high, and should extend as far across as the words, "Calcon Pottery" do up at the top.

Keep the letters fairly well separated, but mass the various sections of wording together. In selecting wording for practice, do not try too much at a time or those with too many curved letters, as these are the most difficult.

MODERN ROMAN LETTERS

A B C D E F G H I J
K L M N O P Q R S T
U V W X Y Z & \$ ¢ !

VERTICAL-OBLIQUE & HORIZONTAL STROKES

HARRISON

BOARDS

WOODMEN

HOW TO
CONSTRUCT
LETTERS

SHOWING BLOCKING IN OF LETTERS

VARIOUS

TAVERN

TAVERN

CORRECT - INCORRECT

R_{SOLID} R_{OUTLINE} R_{SHADED} R_{DOUBLE}

LETTERS MAY BE EXECUTED IN VARIOUS STYLES

STANDARD

USING LARGE & SMALL CAPITALS TOGETHER

TRY AGAIN
TRY AGAIN
TRY AGAIN

ITALIC 1 2 3 4 5 6
LETTER 7 8 9 0 x
Script JAN. 12th 1915

HAPPY THOUGHTS

THAT HAVE MADE HEARTS SING AND FRESHENED UP COURAGE

GLIMPSSES OF
MVNICH LIFE
BY RENÉ REINICKE

A MAN'S HEART MUST BE IN HIS
SKILL AND A MAN'S SOUL IN
HIS CRAFTSMANSHIP... MABIE

EXAMPLES OF
ROMAN
LETTERS
FROM MODERN
MAGAZINES

HOCCSON BROTHERS
SEVEN EAST FORTY-FOURTH STREET NEW YORK CITY

The WEBER
PIANOLA
PLAYER PIANO—\$1000

Chapter XV
THE ART OF LETTERING
Small Letters

WHEN we look at the average page of designed or printed letters, we find that they seem to be made up of two distinct classes. Part of the letters are large and more uniform, and the others smaller and more irregular.

It is important that we should be able to separate these two types of letters at a glance, if we wish to become proficient in Lettering.

These large letters are known among Designers as the Majuscule or Capital letters. In the early days of our alphabets whole pages of books were lettered entirely in these Capital letters. These were placed in continuous lines, the various words sometimes being separated by a dot or ornament.

The Early Scribes: The best work of the scribes was done in the monasteries or for the clergy, who in those days were a powerful factor in the life of the nations. A great many beautiful manuscripts are still in existence, showing the fine designs and wonderful color used by the artists in their lettering.

About the fifth century learning had spread to such an extent that the Alphabets were used extensively by the common people as well as the scribes and literary men. In time the more stiff and formal letters of the scribes became gradually altered and changed until we have what is known as the Small Letters of the alphabet.

Small Letters: We must remember that it took several centuries for this change to take place, just as in our own language we have words which are first coined, then generally used and at last accepted as a part of our vocabulary.

Some of the Small Letters, such as the c, o, v, and s are practically the same as their Capitals. But in others, such as d and g, it is difficult to see any resemblance.

How to Tell Small Letters: In looking over the Small Letters we find that they have one feature which makes them distinctive. We find some letters have strokes extending above the main body of the letter, some below and some with curved finishes. These various letters are spoken of as having

1. Ascending Strokes, as in b, d, h, k, and l.
2. Descending Strokes as in p, and g.
3. Kerns, as in f, j, and y.

The kern is the hooked finish in the Small Letters similar to "swash lines" in the Capital Letters.

As most of the Mottoes, Story Headings and Advertisements contain Small Letters in some form it is a good plan for us to find some rapid manner of sketching them.

Rules in Small Lettering: In the first place, the same rules regarding the thin and thick strokes of the Capitals, also hold good in regard to the Small Letters. The only exception to this is found in the Roman Small Letter g, the bottom half of which has been designed so as to make good "spotting" with the rest of the letter.

The kind of Small Letters most used today are known as the Roman Small Letters, named, like the capitals, from the city of their origin. They go well with Roman Capitals, as well as many of the other styles of Capital Letters.

Sketching Their Outlines: In drawing the letters having a round body, such as the b or d, it is best to sketch a complete circle first, and form the letter over that. The height of the Ascending Stroke of a letter is generally as much again as the height of the body of that letter. The Descending Strokes are about four-fifths the height of the body of the letter.

Guide Lines: In sketching Small Letters on a page you will find that it is necessary to rule two light guide lines for the body of the letters and sometimes a line for the top of the Ascending Strokes. The space between lines of letters is generally twice that of the height of the Small Letter o which you are using. This distance will prevent the Descending Strokes from one line from running into the Ascending Strokes from the line below. Of course this space may be made greater, if the plan of your Lettering calls for it, but you can use the measurement given for a standard.

Spacing: The space between words on a line, is generally a little less than the width of a Small Letter o. In this way we can use the Small o as a basis for our lettering of the Small or "Miniscule" letters as they are sometimes called.

In order to become familiar with the construction of these letters, it is best to sketch them in lines about one inch high. Ink in the outline with a pen and fill in the letters with a brush. After you have made one or two alphabets in this large size, next try lettering a Postcard or a Motto with a Lettering Pen.

Lettering Pens: These Lettering Pens are made expressly for the purpose of making your work easier and more uniform. On Plate 14 are shown some good types of pens, adapted to various purposes. The Soennecken, Blanzy Poure Pens, and Hunt's are adapted to places where letters with thin and thick strokes are needed. The Blanckertz Pens are good where letters with a uniform stroke are best. The "Spoonbill Pens" put out by the Prang Company also make a uniform stroke and are widely used.

In connection with these pens there is manufactured a little brass fountain, which may be slipped over any pen you may be using. This fountain retains the ink, and enables you to letter longer without re-dipping the pen.

In using Lettering Pens the drawing board should be slanted at an angle of about 45°. This slant causes the ink to flow more smoothly and evenly. For rapid work the paper used should have a fairly smooth surface, such as a Coated or Smooth Bristol Board.

Planning a Motto: Your Motto should be first sketched lightly in pencil so as to obtain good arrangement and "spotting" on the page. After this is obtained, take your T square and rule light guide lines for the top and bottom of the body of the letters.

Next rule several vertical lines across the page as a guide to help keep your letters straight.

Dip your Lettering Pen about $\frac{1}{4}$ of an inch into the ink, and holding it firmly, put in the single strokes of the pen. If you keep your pen always held at the same angle, you will find that the pen will of itself determine the thin and the thick strokes of your letters.

Letters are Designs: Do not become discouraged if the letters are irregular at first. If you practice faithfully for a few lessons you

will find that you will soon be able to obtain pleasing results. Consider your letters more as tho you were sketching in little designs or ornaments with a pencil or brush, and you will find the letters will be more artistic and easier to execute.

After you have become more confident with the Lettering Pens you will find no end of use for your knowledge.

You can design small advertisements, combining capitals, small letters and some simple ornaments. Post Cards, Mottos, Book Plates, Cover Designs, Booklets, Monograms, and Posters all have need of lettering.

Never make the mistake of combining Capitals and Small Letters in the wrong way.

Good Rules: 1. Capitals may be used with Smaller Capitals.

2. Capitals may be used at the beginning of sentences or to accent an important word.

3. Capitals may be used in the first letter of an important word, and the rest of the word be in Small Letters.

5. **Never** letter a word using both Capitals and Small Letters mixed together indiscriminately.

Various Styles: The Capital Letters you use may be varied by changing the shape of the little "serifs" or cross strokes used in finishing letters. These may be round, square, hooked or pointed to produce various effects.

2. The letters may be sketched in Outline, Shaded, or given a Double Line.

3. They may be made Heavy and Massive, or Light and Delicate to suit the design in which they are used.

4. Any Small Letters used should **always** harmonize to some extent with the Capitals they accompany.

Mixing Alphabets: After you have become familiar with the standard types of letters such as the Roman, then try designs in which you can use some of the other Alphabets. It is never a good plan to mix the various alphabets very much. This causes a lack of Unity in your Design.

If you have a light delicate design, then a light Italic or Script would go well with it. If you wish to design a religious page, say for

a Church Program, then a Gothic ornament and Gothic Letters would be appropriate.

Adaptability: The table on Plate 14B will help you in selecting appropriate Alphabets. With this as a guide you can choose a good alphabet for any particular design you wish to execute.

As was mentioned in the previous chapter, several new types of letters have come into use recently, some of them very good.

Poster Letters: The Strong Block Letter known as Poster is particularly pleasing and good for Posters, Book Covers, and Car Advertisements. Note particularly the construction of the letter M. the straight line in the S and the shape of the letter A. These all help to give the alphabet individuality.

Another good alphabet is that originated by George Auriol. This letter depends a great deal on the treatment of its "serifs" for its individuality. It is a very pleasing letter for Title Pages, Music Covers, Monograms and Story Headings.

French Letters: A unique alphabet, and one almost bordering on the eccentric, is that by Muccha. The letters in this one have been altered considerably from the Roman, as regards their general form. Only a master designer can do this and still retain harmony.

This alphabet is worth studying. It is especially well adapted to Poster Work.

Several other alphabets are noted on Plate 14B. You will notice that wherever an individual idea is worked into the treatment of the letters, it is consistently carried throughout.

Probably the best work on this important subject is "Lettering" by Thomas W. Stevens of Carnegie Institute which is published by The Prang Company.

Monograms: Interesting Monograms can be worked up, after you have studied the various alphabets. The letters you use can be contracted or extended in general proportion to fit the space they occupy. The letters need not be read at a glance, but they must be fairly legible.

Remember in Monograms, as well as in all your Lettering that good Design is an essential feature. All letters must be Legible, Beautiful and Adapted to the place in which they are being used. (See "Monograms and Ciphers" by Tourbayne, published by The Prang Company).

Problems

On a 5x7 Cream colored card, letter the words, "Never Dissatisfied, but always Unsatisfied."

Choose any of the mottoes given below for this card.

"Success comes in Cans—Failure in Cant's."

"Time and Tide wait for No Man."

"Genius is one per cent Inspiration and ninety-nine per cent Perspiration."

These mottoes may be lettered across the card horizontally, or by turning the card in a vertical direction. The Capitals should be made about twice as high as the body of the Small letters.

Color in Lettering: Keep the weight of the Small Letters uniform, and leave a good margin around the wording. A pleasing effect can be obtained by inking the Capitals in outline and filling them in with some harmonious color, such as Red, Gold or Deep Blue.

2. Next try designing a Monogram, using your own initials, or some easy combination such as A. T. D. or C. B. Make these monograms at least 2 inches high as sketching them smaller makes the work more difficult. Try designing the same initials in a Circle, a Square, a Rectangle and a Triangle.

These should be lettered in Drawing Ink on a Cream-Brown or Gray Paper.

3. Find some short story title in a magazine and letter it on a sheet of Bristol 4x12 inches, with Drawing Ink. This may be arranged with the main title in Capitals and the author's name in a combination of Capitals and Small Letters.

It is always best to block the various sections of letters off into rectangular areas in order to obtain a good arrangement. Then sketch the wording inside these spaces, finishing them with Drawing Ink.

This method will produce more Unity in your work.

Suggestions for Monograms: 1. Letter T. A. B. in an oblong. 2. A. D. in a circle. 3. H. M. in a triangle. 4. Letter J. K. in a square, making the background in Deep Blue and the letters in Orange or Gold. Put a narrow Block border around the square.

Suggestions for Story Headings: 1. The Gray Eagle—By Frank Norris. 2. The Holiday Party—By Arthur Grant. 3. Over the Hills—By Anne B. King. 4. The Mother Dream—By May Stanley. A border or simple ornament may be used with these.

A B C D E
F G H I J
K L M N O
P Q R S T
U V W X
Y Z 1 2 3 4 5
6 7 8 9 0

GERMAN POSTER

A GOOD STRONG LETTER FOR POSTERS
CAR ADS. BILL BOARDS & BOOK COVERS

A B C D E
F G H I J
K L M N O
P Q R S T
U V W X
Y Z 1 2 3 4 5
6 7 8 9 0

MODERN ADVERTISING

AN INTERESTING LEGIBLE ALPHABET
THE ROUND LETTERS GIVE VARIETY

A B C D E
F G H I J
K L M N O
P Q R S T
U V W X
Y Z 1 2 3 4 5
6 7 8 9 0

MODERN FRENCH

AN ALPHABET ADAPTED TO THE BIZARRE
FORM OF POSTERS IT GIVES A DESIGN
A DISTINCTLY HAND LETTERED APPEARANCE

A B C D E
F G H I J
K L M N O
P Q R S T
U V W X
Y Z 1 2 3 4 5
6 7 8 9 0

MODERN ENGLISH

AN ADAPTATION USED BY DESIGNERS. IT
CONTAINS A FREE WELL BALANCED LETTER
WHICH CAN BE VARIED TO FIT THE SPACE USED

SOME GOOD MODERN ALPHABETS THAT COMBINE
BEAUTY OF DESIGN WITH LEGIBLE RESULTS:

Chapter XVI

PEN AND INK DRAWING

IN looking over the modern magazines, you have no doubt noticed that they are generally illustrated by two distinct types of drawings. One of these are the drawings rendered by a series of pen and ink lines or dots, and the other, drawings made by means of smooth tones of wash or watercolor.

Professional artists and designers can tell at a glance by just which medium the various illustrations in magazines have been produced. At the present time the development of Photo-Engraving has made it possible for publishers to produce highly artistic effects at a comparatively moderate cost.

History of Illustrations: The history of the development of Illustrations is very interesting, but we shall only touch on it enough to explain the difference between the various processes that have been used.

The oldest method of illustration was that of prints made from engravings on metal. This idea was developed from the Venetian goldsmiths, who in order to preserve a record of their engraved designs, inked the surface of the jewelry and from it secured an impression upon paper or parchment.

Wood Engraving: Wood Engraving was the next prominent method used for illustrations. This consisted of cutting into some hard wood such as pear or boxwood an illustration in relief. The design was first carefully sketched in pencil over a chalked surface, after which the wood engraver tooled away all parts not desired.

The process was laborious and expensive, small blocks costing considerable. This method, however, was developed into a high art and we find that a great deal of the illustrations during the past century were cut in wood.

Lithography: Lithography superseded Wood Engraving. This process was discovered by a poor author named Senefelder, who was experi-

menting for some inexpensive method of reproducing his writings. Called upon one day to write a laundry bill, he jotted it down on a slab of limestone. It occurred to him to submit the stone to the action of acid. In doing this he found it left the greased line in relief, sufficiently high to print.

The "Offset Process" is a recent modification and development of lithography. The drawing is usually photographed on stone and then "retouched." It is then transferred to a zinc plate which is retouched and fastened around the cylinder of a printing press. The very "low relief" zinc plate prints the drawing on a thin rubber blanket fastened about another cylinder. This ink impression is then "offset" onto the sheet of paper which is fed about a third cylinder. Thus the paper never touches the printing plate and you can print fine half tones and color work on dull finished and non-coated papers. Books and magazines are now being printed **throughout** by the "Offset Process."

Other methods which we find occasionally used on high-grade work are the Steel and Copper Engravings, Etchings, Mezzotints and Photo-gravures. These last processes are **intaglio** in form, that is, the design is cut down into the surface of the metal, while in other forms of engraving the subject is in relief.

Relief engravings are more practical for our present day printing purposes, as they can be printed at the same time as the type in a magazine, which is also in relief. Intaglio plates would necessitate a separate printing.

Photo Engraving: The style of engraving most generally used at the present time is that known as Photo Engraving.

This process produces a relief engraving by means of a combination of photography and etched engravings, and is highly successful for most results.

As so much of the Art work done at the present time is reproduced and printed, it is necessary for a Designer or Illustrator to become familiar with the limitations and possibilities of Photo Engraving.

Line and Halftone: Photo Engraving is divided into two divisions. Line Engraving and Half Tone Engraving.

Line Engravings are used to reproduce Pen Drawings and all subjects executed in Lines or multiple parts of lines, such as Stipple, Spatter work, Ross Board, etc.

Half Tone Engravings are used to reproduce drawings made in softly grading Tones, such as Pencil Work, Wash Work, Paintings and Photographs.

The Engraving Process: Whenever a drawing is made for reproduction, it is sent to the Photo Engraver. Here it is put in front of a large camera and photographed. The negative from this photograph is "printed" by electric light or sunlight onto a sensitized metal plate.

In Pen and Ink work this metal plate is nearly always of zinc. The image resulting from this "print" is dusted with a resinous powder called Dragon's Blood. This powder is burned into the image over a gas flame which renders it impervious to the action of Nitric Acid.

A solution of Nitric Acid is then flowed back and forth over the surface of the plate. This results in the zinc around the image being eaten away, leaving the image in relief.

Anyone can readily see that if weak or fine lines are used they are liable to be broken or eaten away by the acid. This is also true if the reduction of the drawing is too great, resulting in too many fine lines.

Firm Lines: From this you can see that one of the principle requirements in Pen Drawings is that they be executed in **firm black** lines.

After the zinc has been etched some of the large areas between the lines are removed from the zinc by means of what is called a Routing Machine. The zinc is nailed to a wood block to make it "type high" and is then ready for the printer.

This brief description has been given in order to explain to you the necessity of following any rules which may be given in Pen Drawing. All Photo Engravings must go through technical processes which necessitate certain kinds of drawings in order to insure success.

Technique: One of the greatest difficulties in Pen and Ink Work is that of producing the various tones or shades in some consistent technique. For this reason it is essential that you first master the various techniques possible with a pen before attempting difficult subjects.

To execute properly Pen and Ink work you should have the following materials:

Bottle of Prang or other good Water-proof Drawing Ink,
No. 170 Gillott Pen for medium lines,

No. 290 Gillott Pen for fine lines,
No. 3 Brush for filling solid spaces with ink,
Soft Pencil and eraser,
A good jar of Chinese White for correcting errors,
A good grade of Bristol Board for drawings.

Essentials of Good Work: Remember that the first essential in Pen Work is that the lines you draw must be pure black. While the lines may be fine, they should be clear and crisp, never "muddy" or brown at the extremities. To prevent any tendency to blot lines, it is always best to let one set of lines dry before putting any other over them.

Good designers employ various kinds of lines to obtain various effects. To increase tones by means of lines they may use either Cross-hatched, Increased or Accented Lines.

Cross Hatched: By Cross-hatched Lines we mean a technique in which one or more layers of lines are drawn over the first set of lines made. These results should cross each other at an angle to give best results. The more lines added the darker the tone will be.

Increased: Increased Lines are used in technique where the number of lines are increased **without** necessarily **crossing** them.

If the tone you have is not dark enough more lines are drawn on the desired surface, but following the same direction of the first lines made.

Accented: Accented Lines are produced by the pressure of the pen upon the paper. This pressure is made greater when shadows or shades are desired. Pressing the pen firmly and gradually bringing the line to a thin stroke is a good way of practising this technique. This method may be reversed, starting with the thin line first. This style of Pen and Ink is generally found to be the most difficult of the three.

While the methods just mentioned are each a distinct style, you may often combine these various techniques in the same drawing. This is because certain techniques are best fitted to represent certain surfaces.

Therefore use Cross-hatched Lines where it will give the best effects, such as on backgrounds and shadows. Use Increased Lines on sur-

faces such as foregrounds, skies and flat surfaces and Accented Lines on draperies, tree trunks and foliage.

Copying Techniques: One of the best ways to decide which techniques are best adapted to various surfaces is to study Magazine Illustrations. Analyze the different "strokes," and where a particular part interests you copy it faithfully, then render your own subject in the same way.

Gradually you will find that your work will become individual with a personal technique of your own.

Remember that in all cases that the style of technique you use should be governed by the kind of paper on which your drawing is to be printed.

Paper Governs Technique: If the paper on which your illustration is to be printed is smooth and hard, such as is called an Enameled or Coated Paper surface, then the drawing may contain finer details and shades. But if the paper to be printed is soft and pulpy, the drawing should be made with bold and open lines.

The amount of shading you put into a Pen Drawing should also be governed by the use for which it is intended. If it is intended for a Newspaper, Blotter, or rough surfaced Catalog Cover, then the drawing should be made mostly outline, with little shading.

Outline Drawings: For this reason such drawings are called by artists, Outline Drawings.

Half Shade: We often find people who wish a drawing made which will be more finished than an Outline Drawing and yet print well on a medium rough paper. Such is the case in many Booklets, Magazines and Postcards. Drawings of this kind are called Half-Shade Drawings as about half the tones are indicated. Drawings of this kind will be found best for most work.

Full Tone: In high-grade Magazines and Booklets we see Pen Drawings in which all the tones of the subject are produced in Pen lines. Such drawings are called Full Tone, and are generally very carefully worked out. They produce unusually pleasing results when well printed on smooth paper.

Some Good Rules: Below are a few "Don'ts" which will help you to obtain good results in your Pen Work.

1. In sketching your pencil outline do not use a hard pencil or press too heavily. This will spoil the surface of your paper and cause the ink to spread.

2. Keep the pen well charged with ink. This will prevent weak brown lines.

3. Avoid scribbled or "fish hook" lines. These give your drawing a meaningless technique which puts it in the amateur class.

4. Never work over an inked surface before the first lines are dry. Doing so causes the ink to spread and fills in the details.

5. Always erase the pencil lines after the ink has dried. This is especially important if the drawing is to be sent to the Photo Engraver.

The above methods of Pen and Ink are not the only methods used in Pen and Ink work.

In addition to these we have Stipple, Spatter, Ross Board and Shading Machine Drawings.

Stipple Work: Stipple Drawings are produced by making a shade or tone in a series of dots with the **tip** of the pen. These dots are either made larger or more numerous when a darker tone is desired.

This method is a very slow one, but is very pleasing when used in Landscapes or Fabrics.

A good way to avoid a mechanical effect is to stipple the tones in a series of dots following a circular direction, like the ripples from a stone thrown into the water.

Spatter Work: Spatter Drawings are those in which a stipple is produced by means of a knife and a brush. The correct way to make these is as follows:

First sketch in pencil the subject you desire. Purchase at any drug store a little powdered Gum Arabic. Mix this with water until it is about the consistency of mucilage. Next paint this solution over that part of the sketch you **do not** wish to receive the Stipple.

How It Is Done: When this is dry, a tooth brush is filled with ink and held over the drawing with the bristles down. Next take a knife blade and pull it **toward** you over the bristles of the brush. This will cause the ink to fly back in little dots or "spatters" over your drawing.

A little practise will soon show how much ink to put into the tooth brush and how firmly to stroke the knife over it. The closer you hold the brush to the drawing the more quickly the drawing will be spattered.

Too much ink will cause the tooth brush to throw too large a dot.

The ink you use **must be waterproof**. After you have completed your drawing allow it to dry. Then hold it under running water and the Gum Arabic will dissolve, leaving the paper underneath it clear.

Many gradations of tones are possible, if you will cover the various surfaces with various layers of Gum Arabic as you go along. Plate 15 will show you how the tooth brush is held.

Ross Board: Ross Board Drawings are made on a patented paper which has had various surface patterns stamped into it. By rubbing a soft pencil over this surface, an additional tone or graduation is obtained. Lighter tones are obtained by scratching the enameled surface of the board with a sharp knife.

In this way the three main divisions and several intermediary tones are quickly obtained on the one sheet of paper.

These papers are manufactured in many patterns and may be reproduced by the Line Engraving Process.

While both the Ross Board and the Engravings made from them cost more than that for average Pen and Ink work, it is well worth while to purchase a sheet of it and try its effects. Ross Boards known as Nos. 21 and 37 are best for producing Line effects. Nos. 1½ and 2 are good for Stipple effects.

Shading Machine: Shaded Machine Drawings are made by means of gelatine films which have patterns in relief on their surface. This surface is inked with a black ink and transferred onto the surface of the drawing. As the films are transparent, the artist can see just where he is working. These parts not to be inked can be covered with Gum Arabic as in Spatter Work.

This method is interesting and rapid, when once mastered, but the initial cost of the films make them valuable only to Artists who have a great deal of this work to do. Engravers and Commercial Art Shops all make use of the Shading Machine.

In the Pen Work that you do, it as a good plan to try all of them, until you find the style most suited to your purpose.

Reducing Drawings: If your drawings are to be reproduced and printed remember that they should always be drawn larger than they will be when printed. The average Pen Drawing is made twice the height and twice the width.

Finer technique drawings, such as Stipple and Spatter Work should be made only one-half again as large. This means that an illustration intended to be 4 inches wide should be drawn 6 inches wide. Making the drawings larger produces more finished results when the engravings are made. The reducing of the lines eliminates any crudeness which would be evident if drawings were made the same size.

Problems

1. The first problem to be undertaken is that of copying the various techniques in rectangles about $1\frac{1}{2} \times 2$ inches in size. This should be done on a Coated or Smooth Surfaced Bristol Board.

2. After you have made these satisfactorily next try a Still Life Group composed of subjects which can be easily rendered, as a Market Basket with two or three carrots by the side of it. Such a group should be on a page about 5×7 inches in size. Be sure to sketch in the proportions of the basket and vegetables carefully before going ahead with the Pen and Ink Work.

Decide what part of the basket is lightest, and which darkest, just as you would in Tone drawing. If the carrots are in front of the basket decide whether you will make them dark against the Basket or **lighter**. If it is a Shaving Basket, the carrots would be better represented **darker**. Do not put in much background.

It is a good plan to put your tones in first with pencil, in order to try them out, before inking them in. You can use this method until you are more confident of your technique. This problem will look well if done in either Cross-hatched, Increased or Accented lines.

3. Next try a group showing a Soft Hat and a Cane in Stipple Work. Place the cane in back of the hat, lying in a lateral direction. This drawing should also be on a 5×7 sheet. You might use a Pipe, Candle and an opened Book for a Stipple group, as the objects all work well in this medium.

4. For a problem in Spatter Work, try a simple Landscape in an upright panel 3×5 inches in size. Keep all the tones flat. Do not

try to show modelling. Watch also to arrange the dark and light sections of the picture so that they will contrast against each other.

If water and sky are shown they should be the lightest areas of your sketch, unless it is a night scene. In such scenes, the moon and stars would naturally be the lightest, the sky being put in a medium tone.

5. For a Ross Board problem it is a good plan to purchase two half sheets of different boards, say Nos. 37 and 2. Try any of the problems given above in Ross, keeping the picture simple.

To do this satisfactorily, you should first outline your sketch carefully on a paper of medium weight such as a Writing Bond or Letter paper.

Next rub the back of your sketch with a Blue Crayon and transfer it onto the Ross Board. This can be done by thumb-tacking both the sketch and the Ross Board onto your drawing board. The tracing can be done with a hard pencil or an agate pointed Stylus.

In working on the No. 37 Ross, the highlights can be scratched out pure white, the next tones left in dots, the medium shades in the lines, the dark shades rubbed in with soft pencil or black wax crayon pencil and the black put in with Drawing ink. This gives five gradations in all.

Be careful in using pencil not to rub parts already finished with your hand or sleeve, as this will blur the drawing. This can be prevented by keeping a clean sheet of paper under your hand. Finished drawings should be covered with a tissue paper flap.

If your new drawing pens have a tendency to give brown lines take a little vinegar or ammonia on a cloth and rub them firmly. This will cut the grease covering which often comes in the manufacturing of the pens. Treat the pens carefully and they will last a long time. Pens work best after they have been used for a short time.

If the problems given above are too difficult, it is a good plan to try copying good examples from magazine illustrations until you are more familiar with this medium. After that try simple subjects in the same style, and from there on you can work up to a successful style of your own.

A fuller treatment of this subject can be found in "With Pen and Ink" by James Hall, published by The Prang Company.



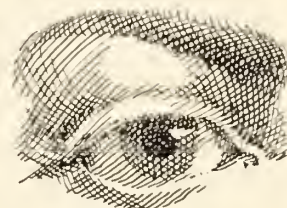
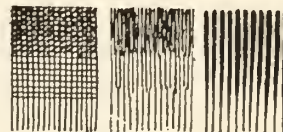
CROSS
HATCHED
LINES



INCREASED
LINES



ACCENTED
LINES



CROSS HATCH



INCREASED LINE



ACCENTED LINE

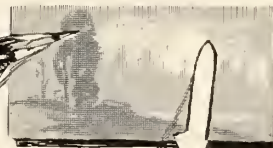


OUTLINE

To make "darks" on
Roughboard a soft pencil
is rubbed
onto the
surface

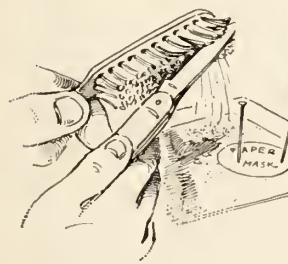


HALF SHADE



The "lights"
are scratched
out with
a sharp
knife

FULL SHADE



Spatter Work is
produced by stroking an
inked brush. The ink
will spatter onto the
drawing where it is un-
protected.



SPATTER
DRAWING



STIPPLE
DRAWING

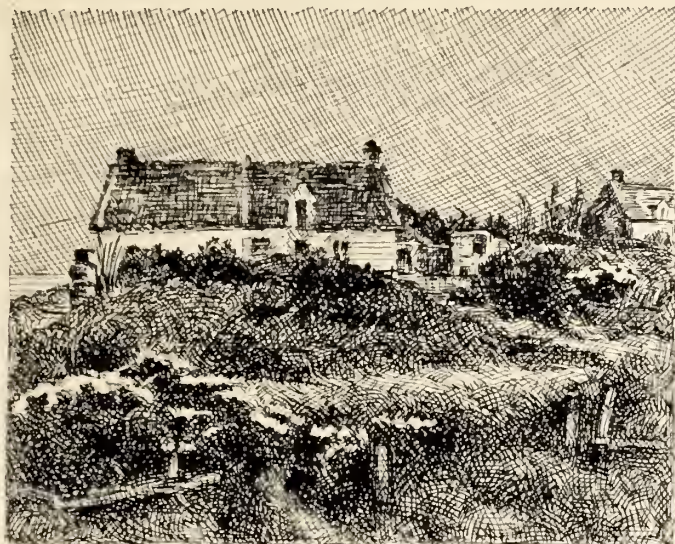


STIPPLE
SCRATCH
BOARD

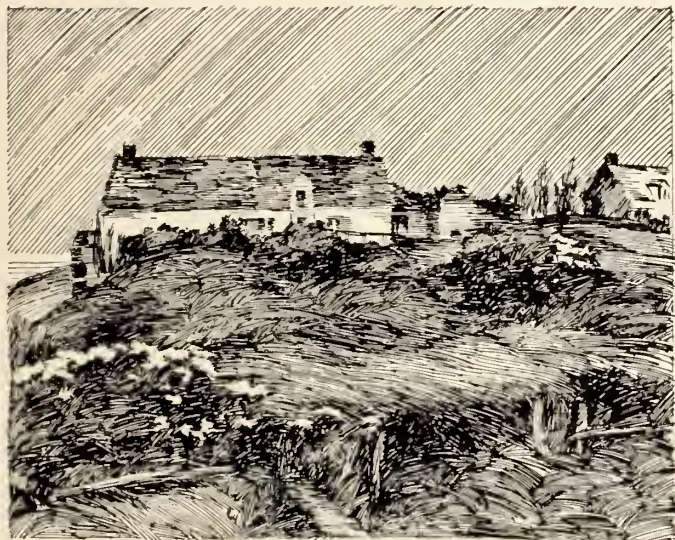


LINE
SCRATCH
BOARD

DRAWINGS
for
FINE LINE
ENGRAVINGS
...

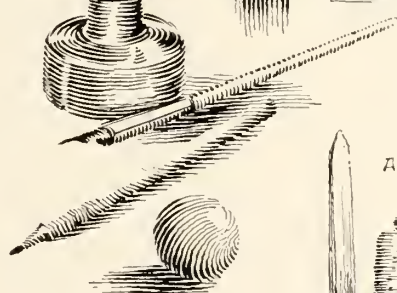
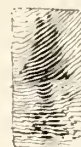


AMY A. PAHL

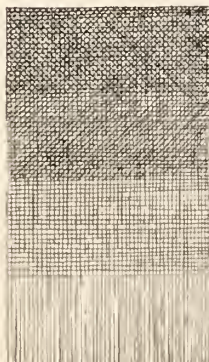


TWO WAYS OF RENDERING A PORTRAIT

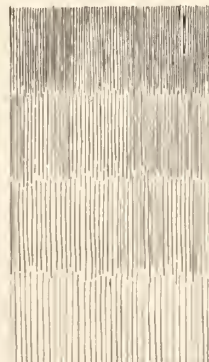
WAVERING LINE



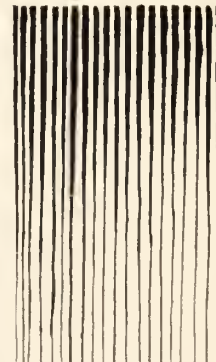
ACCENTED LINES



CROSSHATCH



INCREASED



ACCENTED

• Chapter XVII

WASH DRAWING

AS was mentioned in the last chapter, all engravings printed in the magazines and papers come under one of the two types. We have already seen how Pen and Ink drawings are reproduced, and the techniques used by artists in making this kind of a drawing.

Half Tones: If we were to figure things out, we would be likely to find that the majority of the engravings we see in the modern magazines are what are called "Half Tones." These Half Tones, as has been explained, are the engravings which when printed, show all the little intermediary shades and tones found in Wash Drawings and Oil Paintings.

While Half Tones may be made from drawings which have been executed in black and white only, they are also used to reproduce elaborately colored Oil Paintings or Wash Drawings. The process by which this is done, called the Three Color Process, will be explained later on.

As Artists or Designers, it is necessary that you understand the way these Half Tones are made, so as to achieve the best results when your work is reproduced.

The Half Tone Process: The Half Tone method of making engravings was discovered after the Line method was in use. It is called the Half Tone Process because it reproduces the gradations or half tones between white and dark. The subject to be reproduced may contain any number of tones, and these tones can be faithfully rendered by the Half Tone Process.

One of the greatest differences between Line Engravings and Half-Tones is that in the Half Tone process what is known as a Half Tone Screen is used.

Half Tone Screens :This Screen consists of two pieces of carefully prepared glass that have had parallel lines cut into their surface with a diamond point. These grooves are filled with an opaque substance

and the two pieces of glass then cemented together so that the parallel lines cross each other at right angles, thus forming a "Screen."

When the Engraver photographs the drawing, he places the Half Tone Screen in his camera just in front of the sensitized plate. The rays of light coming through the camera are filtered by this screen. This produces an image on the sensitized plate, which has been cut into little geometric areas by the lines of the screen.

"Dots": These little geometric rectangles and circles or "dots" as they are called, produce a surface which will print when the Half tone has been engraved.

Etching Acids: A print from the exposed negative is made on sensitized metal, either zinc or copper, and the image hardened by heating over a flame. If the metal being used is Zinc, then the image is etched in a weak solution of Nitric Acid. If it is on Copper, then it is immersed in Perchloride of Iron, and the little spaces between the "dots" is etched away.

The finished etching gives a plate covered with a series of little "islands" or raised surfaces. It is these islands which receive the ink and print the image upon the paper.

Various Screens: Naturally the better the surface of the paper on which this Half Tone is printed, the finer or closer together these islands or raised sections may be. For this reason, engravers have a set of screens which vary in the number of parallel lines which are ruled to the square inch.

In this way the artist or printer may designate to the engraver the kind of engraving he desires. If the paper on which the Half Tone is to print has a smooth enameled surface he asks for an entirely different "mesh" of "screen" than if it is to print on newspaper.

For this reason there is given below a table which will help you to designate the kind of a Half Tone you desire.

150 Line Screen—for High grade Books and Illustrations.

133 Line Screen—for Booklets and Average Work.

100 Line Screen—for Second grade Magazines.

85 Line Screen—for Fairly rough Paper as Dodgers, etc.

65 Line Screen—for Newspapers and coarse surfaces.

Enameled and smooth surfaced papers all permit the use of the 133 and 150 line screens. These finer screens always show more tones

and details in the completed engraving than where the coarser ones are used.

The reason why it is necessary for a coarser screen to be used on rough paper is because a fine screened Half Tone always fills up and prints "muddy" when printed on rough paper. In the coarse screens the distance between the dots is greater and thus allows for the spreading of the ink and the texture of the paper, without filling up the details.

All these explanations are necessary as they will help you make the right kind of drawings for best results.

To some people Wash Drawings are much easier to execute than Pen and Ink. To others, the laying in of the large flat tones of wash is much more rapid and satisfactory than covering surfaces with various pen strokes. Both methods have their uses, and Illustrators and Designers of any merit can generally handle both methods fairly well.

Rules In Wash Work: There are two things to keep uppermost in your mind when making Wash Drawings. The first is to think of the various sections of your drawings as Tones, and to obtain your modelling by the light or darkness of the wash tone you use.

The second idea is that of putting the tone of wash you desire on the paper, and leaving it alone. The desire to retouch or "stir up" a tone of wash when it is still wet is a common failing, and one which always spoils a drawing.

Wash Drawings are made by different methods. The most important of these are termed Superimposed Washes, Direct Wash, and Opaque Work. These methods may also be used in a combined drawing, in which Pen and Ink or Charcoal or Crayon are used in connection with the wash.

Superimposed Washes: In Superimposed Wash Work the tones are produced by washes being placed over each other until the deepest or full tone is obtained. As water color is transparent each new layer of color increases the darkness of the first wash, making it stronger and deeper.

In Superimposed Work there are two ways of proceeding:

1—After the drawing has been carefully sketched in light pencil outlines, the accents and deepest parts are put in with a brush and a dark tone of paint. When these accents are fairly dry, additional

lighter washes are put over them, building up the gradations step by step.

2—In the second method, the subject is outlined in pencil and the lightest portions washed in first. The middle tones are put in next and the darks and accents last.

This style of drawing is good for the beginner as it allows for more or less adjusting of tone values until the desired result is obtained. It never pays, however, to work so long over the details that the drawing looks "fussy" or the surface of the paper begins to wear out. Properly used this method will give drawings in which a great deal of life or atmosphere may be obtained.

Direct Wash: In the Direct Method the artist produces tones and details without superimposing washes of color. He decides the strength of tone or color he wishes to put into a certain part of his drawing, and mixes a wash as close to this as possible. This tone is put within its correct boundary and left alone.

Details and accents are completed as the parts are worked upon. Thus the drawing is completed as the surface is covered.

This method required more skill and confidence than the Superimposed Washes, but is a fine way of obtaining crisp, clean cut effects.

Using this method will not only enable you to work rapidly, but will soon give you a knowledge of tone values and the technical tendencies of various colors. You will find as a rule, that the tones will dry out lighter than you expected.

Opaque Wash: In the Opaque Method the wash water color is mixed with Chinese White to give it an opaqueness similar to Oil Paints.

The Opaque Work is very similar to painting in oils, and permits freedom in working. In the transparent washes, highlights and lighter tones must be left or rubbed out. With opaque wash the highlights and lighter tones can be painted right over the darker parts.

Opaque Tones: Opaque Work allows for the changing and constructing of values as you go along, and for this reason is preferred by many Illustrators. One of its disadvantages lies in the tendency of some of its tones to come out too light or "choppy" when photographed by the engraver. A little study and testing of the results of your drawings will soon show you which tones will reproduce most satisfactorily.

Because of the tendency of some Chinese White to photograph differently than it appears on the drawing, various makes have been put on the market guaranteed to photograph without variation. In purchasing White, especially for Opaque Wash Work, be sure to obtain a grade which is guaranteed to reproduce satisfactorily.

Combined Method: In the combined method of Wash Work various ideas can be tried. If waterproof Ink is combined with wash, it may be used preceeding the washes or added last. This last method is preferable, as then only those details and accents really necessary need be added. In either case the ink should be **dry** before adding the wash or vice versa. Otherwise the ink will run into the wash tones and produce a muddy drawing.

Avoid the use of a hard, "wiry" pen line sketched around delicate wash tones. If such a pen line is used, it should be finished in a strictly Poster style. In other words the pen line put around the wash should be of a uniform width throughout, and not varied from thin to thick strokes.

An exceptionally good method used by Illustrators in Wash Work is that of combining the wash with a Crayon or Pencil. Sometimes a good grade of Charcoal is used.

Conte Crayon: Of all these last methods the best is that of combining Wash with Conte Crayon or Blaisdell Pencil strokes. In most cases the drawing is sketched in lightly with a soft pencil, then the wash tones put in. After these are dry, the Conte Crayon is used for accents, outlines and details.

Most Water color and Illustration Paper has a slightly roughened surface. This surface gives the Crayon strokes a pebbled appearance, which helps the completed drawing to have a free and yet crisp effect.

Blaisdell Pencil: Blaisdell Pencil varies from Conte Crayon in that it is of a more greasy substance, and is better in cases where you desire to put the wash tones into the drawing last. Crayon or Charcoal are sometimes used to sketch the drawing before the wash tones have been put in. In this case the Crayon is given a light spray of "fixatif" to make it adhere to the surface. After this is dry, the wash can be put right over the Crayon, without fear of its coming off the paper.

Fixatif: This Fixatif may be obtained at any art store, and is made of Alcohol and White Shellac. It is useful to spray over any Crayon, Charcoal or Pencil drawings, as it keeps the strokes from rubbing off. The "blower" with which the Fixatif is sprayed, should never be held **too close** to the drawing. A distance of about 12 inches away is good. An illustration of it is given in Plate 16.

To recommend any specific method of Wash Work would not be well, as the kind of drawing must depend on the nature of the subject and the artist's particular likes and dislikes.

Illustrators Methods: Well known Illustrators use almost any combination which will give them satisfactory results. Many times illustrations are reproduced, in which Charcoal, Crayon, Transparent and Opaque Wash have been combined.

In the beginning it would be well to pick out the method which you think would be easiest for you to master. After you have become fairly confident of this, then try another style, etc.

In all the methods, use large broad washes. **Do not work small.** Keep your drawing about fifteen inches away and do not hold the brush too near the point. This will help you to obtain strong bold effects.

Newspaper Drawings: Drawings made for actual reproduction must be finished so as to look well on the paper on which they will print. Newspaper Work requires a drawing made with considerable contrast of tones, and sharp details. This is because the coarse Newspaper Screen cuts up the details in the engraving and neutralizes the contrasts.

Note the section in Plate 16, showing the difference between the fine and coarse screens.

If your drawing is for the average Illustration or Commercial Design, then make the drawing with a little sharper contrast than you desire in the printed results. As the details become somewhat softened in the engraving, the results will then be about right.

High Grade Work: For very high grade half tones such as are reproduced with a 150 line screen, the drawings may be finished quite carefully in the details. The screen will show all of these accurately.

Cases may arise in which you desire to make a Wash Drawing which you wish reproduced in various colors. There are several ways by which this may be done.

A highly satisfactory method is that called the Three Color Process. By means of Color Filters, a wash drawing or oil painting in full colors, is photographed after the same manner as a black and white wash drawing.

Three Color Process: These Color Filters, however, separate the Red, Blue, and Yellow. A separate negative and print is made for each of these three colors. The screen "dots" are turned at different angles to avoid a "pattern" of lines and the etchings of these three colors are printed over each other.

The results produces the full colors of the original, as all the colors we use are based on Red, Blue, and Yellow.

Sometimes an additional plate of Black is added to give the picture snap and strength in the deepest parts. This makes four printings or "impressions" as they are called. The results, if carefully done, are very satisfactory.

In many cases intricate subjects, such as Textiles, Insects, and Fabrics are put before the camera and photographed direct. The printed results show all the colors of the original.

Prices: This method is naturally quite expensive, costing generally \$1.00 or more a square inch. In this way a set of three color plates for color printing, 4x6 inches in size would cost at least \$24.00. The results, however, are worth the expenditure.

There are many other methods which the engraver can suggest to you by which Wash Drawings may be reproduced in two or more colors. Sometimes a Half Tone and Line Engraving Tints are combined. Other times two Half Tones are made from the same negative and etched so as to print in different colors.

To make correctly a drawing for color reproduction, it is always best to write or call on some engraving concern. Tell them what you desire and about how much you can put into these engravings. A reliable house will be glad to talk the matter over, and show you how you can obtain the best color results within your expenditure.

Color Drawings: It is never a good plan to try Wash Drawings in color until you have first mastered black and white Wash Work. Experience in this will help you to understand Tone values. Then when you try sketches in colors you have only the question of Hues and Color Combinations to work out.

Paper for Water Color Work should **never** be smooth and glossy. While it need not be unusually rough it must have a slight "tooth" to hold the wash tones.

Large Drawings: In large drawings, artists sometimes obtain best satisfaction by pasting the paper to the drawing board all around the edges. This prevents the paper from "buckling" or warping when the wash tones are put over it. To paste the paper properly it should first be dampened all over with a sponge. This expands the paper, so that when it dries out it stretches tightly over the drawing board.

The paste should be put around the edges of the paper only, on a strip about one inch wide.

For average drawings, thumb-tacking the paper to the board will be satisfactory.

Smooth Tones: To obtain smooth, even wash tones, the paper should always be first given a coat of **clear water** with your thumb. When this is still slightly damp, the color you want to use is put over this surface and the wash will dry in a smooth even tone.

Never yield to the temptation to try to change a wash tone when it is still damp. Many times tones look uneven, but when left to dry completely, come out perfectly.

Lightening Tones: If the tone you obtain is too light, let it dry and add another. If it is too dark, it may be helped by the following method:

Place a wash of clear water over the part you wish lighter. Let this stand about 5 minutes. Then take a blotter and pad this clear water off. The water which the blotter takes up will also remove some of the color. This can be repeated until the tone is quite light.

Drawing Board: It is always good to have your drawing board at a slight slant, and to work from the top down. This will result in better tones and prevent your putting your sleeve into the drawing. Occasionally, in large washes a surplus of color will accumulate at the bottom of a tone of wash. This can be taken up on the point of a dry brush and wiped onto a blotter.

Many short cuts and good combinations will occur to you as you become familiar with your brushes and colors. Above all things do not become discouraged if your first or second drawing is not just right. No one ever executed a masterpiece in ten minutes.

Below are given several problems which will work out well in the mediums suggested. Try the one which looks easiest to you and then some of the others.

Problems

1. First purchase three or four sheets of a good medium Watercolor Paper, such as Strathmore or Whatman's. As it is difficult to put in large smooth washes of color at first, try a sketch about 7x9 inches in size.

If you have never had any experience in Watercolor it would be well to pick out some simple Landscape or Still Life picture which you can find in any printed magazine. Pick out an interesting part of this picture, arrange it in good composition, and make a Watercolor copy of it.

This will help you to become familiar with your colors and brushes. Make the sketch in either black and white wash or a brown Sepia tone. Do not try to use various colors as this will be too difficult at first.

Select some subject which shows a simple Pine Tree, a Lake and a Road, or a Pitcher, a Cup and two or three Peaches. These subjects, while simple, can be made into interesting compositions.

Do not forget, above all things, to plan for various Tone values. Never make a wash sketch, which when held at a little distance, seems to be all one solid mass. Make the objects in the foreground stand out against the background. This can be done by having a light object against a dark background, or a dark object, such as a tree against a light background, etc.

This "playing up" of lights against darks is very necessary to a good watercolor sketch.

This first problem had better be tried in Superimposed Washes.

2. Next take some simple object such as a Book or a Candle and Candlestick to use in Direct Work. Make a light pencil outline of its shape and main divisions.

Then mix up a tone as close as possible to that which you think would represent the medium shades of the subject. Put this in and let it dry. When it is fairly dry add the deepest blacks, finishing the sketch with one or two light shades in the highlights.

This method, while more difficult than the first, will develop your ability to judge relative shades and tones correctly.

This sketch may be 6x8 inches in size or larger.

3. For Opaque Work an entirely different plan may be tried. Select some Poster which you would like to copy, or arrange some group which would make a good Poster composition.

Next purchase some Mat Board of a medium gray or a medium brown tone. Sketch the pencil outline of your Poster upon this in some pleasing proportion such as 8x10 inches.

After this is carefully outlined, mix up some Chinese White and put in the highlights with flat tones. When these are dry, mix up some Black Wash and sketch in the Blacks.

This method will keep your work simple, and will give you a good basis for all Opaque Wash Work. If you have noticed the modern illustrations and advertisements, you will have seen many clever designs worked up in this way.

After you have tried this style, then you can make an Opaque Wash Drawing on white paper, mixing up a medium water color wash to give your middle tones.

All the work of this problem must be done in Opaque or "Tempera" colors, as they are sometimes called.

4. The Combined Method of working is especially good for those interested in Illustrations. Select some simple figure in any of the poses suggested in the chapter on Figure Drawing.

Outline the sketch with a soft pencil. Put in the wash tones, keeping them crisp and clear cut. When these are dry, add your accents and detail shading with a Conte Crayon.

This way of working will be found very interesting.

It would be better for you to omit the use of any colors but Black, White and Sepia. Later on, when the study of Color has been taken up, then the above methods can be tried in color work.

Suggestions for subjects: 1. Dutch Landscape with Windmill and a winding Road. 2. Winter Scene with a Blackbird on a Stump and several others flying away. 3. A Tropical Scene showing a Palm Tree and a bit of Ocean Beach. 4. A Sailboat on the Lake. 5. Wigwam beside a River. Hills in the background. 6. A simple sketch of a Peacock Feather. 7. Still Life group of Reading Lamp, Spectacles and an old Book. 8. Sketch of a Butterfly or some Insect, full size. 9. Side View of the Family Cat. 11. Some poster Landscape, showing dark Trees against a Harvest Moon.

1
Outline and
Accents



2
Flat Shades
Added



3



Finished
Drawing



Light &
Dark
Wash on
Toned
Paper



Shading
added
completes
the
Subject



Opaque
Wash



SPRAYING
FIXATIVE

Newspaper Screen



Crayon Pencil
and Wash

Pedro
J.
Lemos

Chapter XVIII

THE PLANNING OF ADVERTISEMENTS

ONE of the largest fields in which we find artists employed is that of originating ideas to be used in Advertising. In many cases they may be required to plan the whole advertisement, including both illustration, lettering and ornaments. In any case the artist finds that the mere designing of an artistic or a "pretty" illustration is not all that is necessary to the making of a successful advertisement. Large sums of money are wasted every year on advertisements that somehow fail to bring returns. This is because many people do not realize that good advertisements are based on certain psychological laws and Art.

Advertising Principles: Many artists feel that anything artistic should not be tied down to any hard and fast rules and regulations. It is this mistaken idea that has caused many of the unsuccessful advertisements.

A good musician must first know his keyboard thoroughly before he can produce pleasing melody. Likewise, the good artist must be familiar with certain laws of harmony and their effect when used in his work.

Essentials of a Good "Ad": The most essential idea to remember in planning advertisements is that they should first attract attention, next arouse interest, and last create a desire on the part of the reader for whatever is being advertised.

In all three of these items, the artistic part of the advertisement is of great importance. It is already an accepted fact that the most convincing advertisements are those which rely to a great extent upon the picture part of the design.

The Power of Good Illustrations: Many of the most forceful American and European advertisements consist of about three-fourths illustration and one-fourth reading matter. Since this is the case, and

we find advertising is so important in the business world today, we can see the value of becoming well grounded in advertising principles.

It is impossible, from an advertising standpoint, to go quite deeply into the various laws governing the use of advertising. In this chapter we give mainly those items necessary from the artist's standpoint, to the producing of a good advertisement.

Five good rules observed in all artistic and convincing advertisements are as follows.

1. Plan for a good margin.
2. Watch for balance.
3. Work for rhythm.
4. Arrange good emphasis.
5. Be sure the design is adapted to its purpose.

Margins: In Rule 1 we find an important item generally overlooked by beginners in planning designs. Just as a house looks well in a good setting or a picture best when in a well proportioned frame, so a design is shown to best advantage when surrounded by the right margin.

Publishers determine carefully just the right proportion of margin they will leave around the pages of reading matter in their books. This is because they realize that the margin surrounding the type has a tremendous effect on its general appearance.

Note in the Working Chart how much better the gray area looks in the second diagram than in the first. This effect is not so much the result of the areas used, as the margins which have been left around them.

What to Avoid: For this reason we should always avoid margins which are too narrow. Such a margin gives the whole design a "stingy" or crowded effect. Margins which are set too low on the page give the design the appearance of having slipped down. Both of the faults mentioned detract from the dignity of the design and should be avoided.

The widest margin, if any, should be at the bottom, as this tends to place the design where no part of it will be left unread.

Balance: Balance, as in Rule 2, need not necessarily mean that everything be placed in some stiff or rigid manner, with an equal amount of material on each side of the page. It means that the arrangement of the advertisement or design be such that the reader does not have

the subconscious feeling that the design is overweighted or "lopsided" in some particular section.

Note in Plate 17 how the fourth diagram on the top line lacks good balance.

Some people have a natural eye for balance, and can tell at a glance when a design or a poster is weak in structure. Sometimes increasing an area a small fraction of an inch will give the whole design the strength which it lacked before.

Interior Decorators who have a good eye for balance find that this sense of proportion is a great aid in the planning of room arrangements. It does not take much of a difference in the placing of a frieze, rug or molding to throw a whole room arrangement out of harmony.

The Optical Center: In looking at a page the eye naturally rests on an imaginary line known as the Optical Center. This is the line slightly above the actual center of the page, if measured from top to bottom.

Having this line placed, the designer always locates his most important material in this vicinity. He then arranges the rest of his material in a harmonious manner around it. In looking over a design, if a certain spot or mass of wording appears out of place, this can be verified by covering it with a blank slip of paper or the hand, to see if the composition appears better without it.

Rhythm: Rhythm is closely allied to Balance. Rhythm has the effect of carrying the eye in a pleasing manner from one part of the design to the other. In this way the danger of the reader looking at only a part of an advertisement is avoided.

Often the line used to produce this effect of rhythm is a minor one, but it does its work just as well. Note for instance in the Working Chart the advertisement for Damascus Pins. The arch produced by the front of the dresser if continued down would point directly to the word "Damascus," which is the main display line.

Its Value: In the foreign advertisement of a Hunter, the eye unconsciously travels from the tip of the gun barrel to the target. In this way the whole advertisement is united and held together. On the other hand, the curved line in the Adler piano advertisement has the tendency to carry the eye out and away from the reading matter.

If a design appears to be made of sections chopped off and set down without a certain relation of one part to another, then it is lacking in rhythm.

When the motion becomes so evident that it detracts attention from the design itself, it is better left out or toned down. An example of such an effect is shown in the "Capitulation of Mr. Hyleigh" on the Working Plate.

Emphasis is the one factor which creates the most trouble in advertising.

Emphasis: Because of the fact that competition is keener every year, advertising men leave no stone upturned to obtain the best of results. Where "ads" are placed next to each other in the street cars, magazines and billboards, it is essential that they have emphasis. The pitfall lies in overdoing this and producing an emphasis that is unpleasant or kills the original idea of the whole advertisement.

Emphasis By Position: Emphasis may be obtained in various ways. The most common found in advertising are those of Shape, Size and Color.

In addition to this, the position of an area in an advertisement has much to do with its being noticed. It is generally agreed among advertising men that the top half of a page for instance, receives nearly 10% more attention than the bottom half.

Again, if a line were drawn across the center of a page in a horizontal direction, that section just above this line is generally credited with catching 50% of the attention given the whole advertisement.

In this way, if we wish to place any part of our "ad" so that the eye will be most apt to notice it, we locate it on or near the Optical Center.

Emphasis By Shape: Many of the magazine and newspaper advertisements make use of attractive spots or shapes to produce emphasis. Sometimes a little spot such as a circle or an ellipse is used to catch the eye, after which the interest is aroused in the rest of the "ad."

Such shapes used in advertisements are always good, provided they are pleasing. Combinations such as the areas shown in the fourth diagram on the top line of the Working Plate are not good. They may attract attention, but they do not direct the mind to the special mission of the advertisements.

The third diagram in the second line shows an example of a border line which is so attractive that it pulls the eye away from the advertisement which it encloses.

Compare these with the advertisement of the Ritz-Carlton Hotel in which the wreathed circle at the top catches the eye, but directs it to the name of the hotel directly beneath it.

Use of Ornaments: The use of arrow points, triangles, or irregular shaped advertisements are all good if not overdone. Never use too many kinds of ornaments in the one design, and try if possible to have them connected with the main lines of your design. Ornaments and spots which look as though they were dropped in as an afterthought seldom help the advertisement.

Sometimes the artist finds it necessary to emphasize a certain part of his design by making it large in proportion. This is often the case where the area near the Optical Center has already been used for some important wording such as a "catch phrase."

Emphasis in Size: In this way the picture of some special object such as a package of crackers, or a can of condensed milk can be made sufficiently large to attract attention in spite of its location.

Designs planned so as to show the particular article advertised in a large or "Giant Package" form have been very successfully used in car ads and billboards. It helps the customer to identify the article advertised whenever he sees it in the store.

Emphasis by Color: Last of all the methods of emphasis is that of color. This method in late years has become the most important of all.

An advertiser who is able to produce his advertisements in color finds that the returns are worth the expense. Color often attracts when nothing else will. This is especially true of outdoor advertising.

Men who understand the correct use of color in advertising work are in great demand. This is because colors incorrectly used produce an irritating effect which destroys the efficiency of the whole advertisement.

Laws of Color: In the next chapter we will study the laws of Color and their effect. It is sufficient to say here that the strongest or most attractive colors, such as Red, should be used in those sections of the design which we wish to emphasize.

Never put the strongest colors in unimportant ornaments or borders, as they invariably take the eye away from the points within the design which should be prominent.

In Rule 5 we have that of the harmony of the design with the main idea of the advertisement.

Harmony of Design: In looking at an advertisement for Umbrellas if your first impression is Smoking Tobacco, then the design and advertisement are not in harmony. Mistakes of this kind are made frequently. A good way to avoid this is to read over the ad carefully and decide which three words would tell the message of the ad the best. Then try to plan your illustration in harmony with these words. In this way if the wording was left out, the picture would still tell the story.

In addition to the illustration used in an advertisement, the lettering, borders, and ornaments should all be of a nature to help out the message you wish the design to tell. For instance, a light delicate letter, such as a French Script, would be out of harmony with a heavy Gothic border.

In the same way there would be a lack of proper harmony in a design for a religious program in which a semi-humorous ornament had been used to fill a space.

Simplicity Important: We find that most of the modern advertisements tell their story in the simplest and most direct manner possible. The lettering used should be easy to read, and the illustration executed in the flat decorative style used in Posters. Nothing should be put in just to fill space.

Problems

1. Select some newspaper or magazine advertisement which you think can be improved. Read over the text and see if there is any part which can be left out.

Next select some idea which you think would be an improvement on the illustration formerly used. After this block out on a sheet of Bristol Board a space the same size as the "ad" which you are re-drawing. Sketch roughly in pencil the illustration and the lettering you think necessary.

2. Try the same "ad" using a different arrangement and illustration. After doing this place them together and select the best one.

The design selected can then be carefully finished in Drawing Ink or in Black Wash. Do not use colors in these first ones until you have become more familiar with the general arrangement of your "ads."

If the drawing is too small to be easily drawn the same size, it can be made $1\frac{1}{2}$ or 2 times the size of the original advertisement.

The same idea can be tried with a Car Ad, Billboard, or Window Card.

The lettering chosen should be strong and simple. Letters of this nature are not only easier to execute but also more easily read. The lettering used may be all in Capitals or in both Capitals and Small Letters. An alphabet similar to the Austrian Type shown in Plate 13B makes a good letter for this work.

As a variation the "ad" may be sketched on thin paper and then traced onto a medium gray, brown or gray green mat board. Part of the "ad" can then be put in with Chinese White and the rest in Black Ink. A strong, "snappy" advertisement can be produced in this manner.

Suggestions: For News Ads—1. Pragers Spring Scale—New Fashions for the new season—Corner Market and Jones Sts. 2. Newmans—18th and Misson Streets—A wonderful array of Furniture and Household Goods. 3. Capwells—The Rug House—Unexcelled Oriental designs—City Hall Square. (Size 4x7 inches).

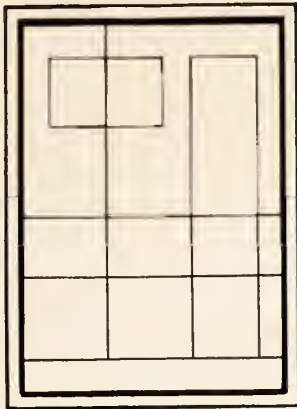
For Car Ads—1. Hotel Hollywood—Los Angeles—County Comforts—City Conveniences. 2. Heinz Spaghetti—Just heat and serve.—Ready cooked with Tomato Sauce. 3. Ridgways Tea—Simply delicious. Your grocer has it. (Size $5\frac{1}{2}$ x $10\frac{1}{2}$ inches or 11x21 inches).

For Window Cards—1. Spring Display of Hats—Style, price, quality. 2. Arrow Collars—for men who like comfort—2 for 25c. 3. Paris Furs—Come in and see them. All sizes.

The names given above have been chosen to a great extent for their briefness. It is best to attempt only the simplest effects at first, as lettering takes much longer than appears at a glance.

While the actual size of the Car Ads is 11x21 inches it might be well to make your first sketch half this size as it will be easier to handle.

Any of the above names may be shortened or changed to suit your design. Later it would be a good plan to try sketching a design for some firm in your locality.

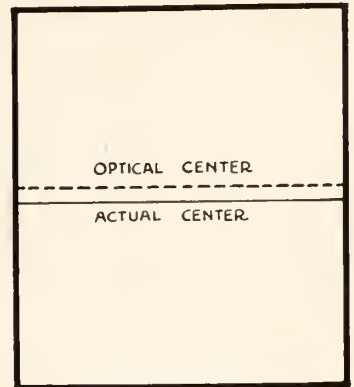


Showing how good Balance in the blocking out of areas produces good DESIGN in the Booklet on the right..

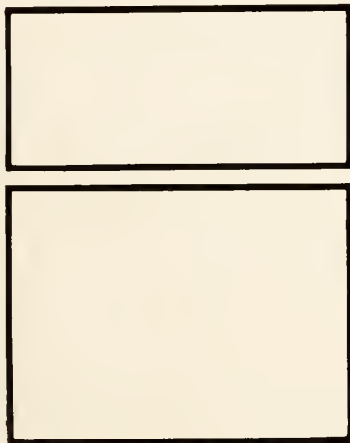


WORKING DRAWING for BOOKLET COVER. The colors in the original added to its general Unity..

SOME IDEAS FOR ADVERTISING DESIGN



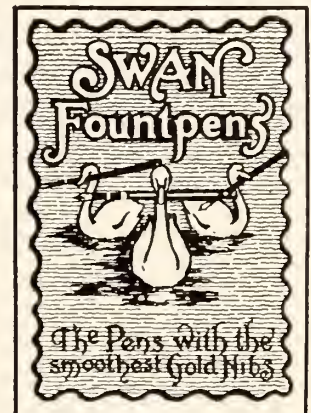
SHOWING OPTICAL CENTER



THE GREEKS found that an area was most pleasingly divided when cut any where between $\frac{1}{2}$ & $\frac{2}{3}$ its total height.



A DESIGN planned so as to carry the eye from the top to the bottom wording without any confusing effects..



A DESIGN containing too many curves. The wavy border detracts. Also poor arrangement of Swans..

Delivered TO YOU FREE

Your choice of 44 styles, colors and sizes in the famous line of "RANGER" bicycles shown in full color in the big new Free Catalog. We pay all the freight charges from Chicago to your town.

30 Days Free Trial—allowed on the bicycle you select, actual riding test in your own town for a full month. Do not buy until you get our great value trial offer and low Factory-Direct-To-Rider terms and prices.

TIRES, LAMPS, HORNS, pedals—single wheels and repair parts for all makes of bicycles at half usual prices. No one else can offer you such values and such terms.

SEND NO MONEY but write today for the big new Catalog. It's free.

MEAD CYCLE COMPANY
Dept. R-15, Chicago, Ill.

Rider Agents Wanted

A SMALL "AD" SPOILED BY OVER CROWDING



Freeman's FACE POWDER

Beauty and artistic sense made "Peggy" Robinson the popular actress of her day, even as merit gave Freeman's its 30-year vogue with women who know.

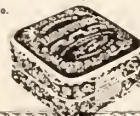
All toilet counters Sample mailed free.

The Freeman Perfume Co.

Dept. 53

Cincinnati, Ohio

25c



ART SCHOOL
THE ART INSTITUTE OF CHICAGO

COURSES in Drawing, Painting, Illustration, Modeling, Designing, Pottery and Normal Art. This includes classes in Interior Decoration, Commercial Art, Costume Design, Cartooning and Poster Design.

Finest facilities for Art Study in Museum Collections, Lecture Course and Ryerson Art Library all under the same roof as the School.

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Write Registrar for particulars.

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Dept. 40 Michigan Ave. at Adams St.
Chicago, Ill.

TWO GOOD DESIGN

ONE SHOWS DELICATE TREATMENT OF BOTH DESIGN & LETTERING

THE OTHER A BOLD DECORATIVE EFFECT

SAVE! Speak QUICK

WAY UNDER MANUFACTURER'S PRICE!

Genuine, visible writing Underwoods—built in our factory, with Back Spacer, Tabulator, Lateral Guide, Silent Attachment, 2-color Ribbon, Waterproof Cover and Special Touch Typewriting Guide Book sent on 10 Days' Free Trial.

Over 100,000 Underwoods Sold to U.S. Govt.

That makes rebuilt Underwoods yours so, speak quick for yours Guaranteed for 1 year. You can rent, buy on easy terms, secure cash discount or even own through leasing plan; no canvassing. Ask for Form No. 33.

TYPEWRITER EMPORIUM
38-38 Lake St.
CHICAGO, ILL.

RENT OR BUY

A "WILD" DESIGN WITH ITS MAIN FEATURE KILLED BY THE BORDER

Chapter XIX

THE USE OF COLORING

OF all the phases of art study, that of Color is the most interesting.

If a correct knowledge of Color is once obtained and used in a practical way there is scarcely any limit to its value for artists.

All advertising first reaches the public through the sense of sight, and for this reason color plays a highly important part in successful advertisements. All designers of advertising should be able to give a good reason for the color combinations they use and to have a knowledge of the scientific laws in back of the Color spectrum.

Good Color harmonies are no more expensive than gaudy or vulgar ones, and the results are much more lasting and effective.

Color Theories: In studying Color you will find that there are a great number of theories advanced, but so far the most practical for commercial purposes is that used by Chevreul the French designer.

His theory is that the three colors, Red, Blue and Yellow are the basis for all the other colors.

If we place a glass prism in the sun so that a ray of light passes through it, we find that this ray will throw onto the surface it strikes a rainbow series of colors. These colors are Red, Orange, Yellow, Green, Blue and Violet.

Primary Colors: Three of these colors Red, Yellow, and Blue are called Primary Colors, because they cannot be produced by a mixture of other colors. If a Red ray, a Blue, and Yellow one are blended together scientifically they produce a pure white light such as we see in sunlight.

If we take a Red, Yellow and Blue from our Oil Paints or Water Colors and mix them together in a certain proportion we find that they produce a pure gray. This is because there is a sediment in these manufactured colors, and this sediment collects and makes our mixture gray.

If you will refer to Plate 18 you will find there a diagram of the Color Circle with the colors in correct relation to each other. You will notice that the Colors Red, Yellow and Blue are just a third of the circle apart.

Between Red and Yellow we find Orange. This means that if put together a mixture of half Red and half Yellow would produce the color called Orange.

Between Yellow and Blue we have Green which we obtain by mixing the two first named colors.

Between Blue and Red we find Violet, obtained by mixing the Blue and Red together.

Secondary Colors: These new colors, Orange, Green, and Violet are called the Secondary Colors because they each contain **two** of the primary colors. Secondary colors are more interesting than Primary colors because they contain a wider range of color.

By correctly using these Primary and Secondary Colors together we can produce some very interesting effects.

For instance if we have a design in which we wish to obtain a good harmony, we can make use of what are known as Complementary Colors. If we select any one of the three Primary Colors we find that the remaining two mixed together form its complement.

Complementary Colors: As an example if we select the Primary Color Blue, we find its complement to be a combination of the two remaining primaries (Yellow and Red) or Orange. In this way we find the Complementary of Red to be Green, of Yellow to be Violet, and of Blue to be Orange.

When you use these Complementary Colors together you will find that they possess the qualities of enriching or emphasizing each other. For this reason, two complementaries used together form the best harmony when they are separated by a line of black or gray. A gold or silver line might be used in the same way to separate them.

Sometimes in using complementaries, you will find that they do not make the best of harmonies. In cases of this kind it is a good plan to mix a little of one complementary into the other before putting them on the paper.

For instance, take Red and Green. A little Red mixed into the Green, and a little Green mixed into the Red will make a softer and

better contrast than pure Red and Green. Mixing Black into colors tends to give them a muddy, common appearance.

Analogous Colors: Besides Complementary Harmonies, we have those called Analogous Harmonies.

Analogous or related Colors are those which are adjacent or neighbors in the color circle. Analogous Colors are those which possess some common element. If we take Yellow, Yellow Green, and Green we have a group of Analogous Colors because they possess in different quantities the common element Yellow.

Blue is the common element in the analogous colors, Blue-green, Blue, Blue-violet and Violet.

This one color running through a series of analogous colors has the effect of tying or holding them together. Sometimes the addition of a little gray to each of a series of analogous colors will still further harmonize them.

Use of Analogy: Analogous color schemes are often used in rooms as they produce a pleasant harmony. Rooms in which the analogous colors are based on some hue such as soft Blue Gray, Brown or Green are always restful.

Contrasting Colors: While Analogous harmonies are good, they lack the contrast of color which it is possible to obtain in Complementary Color schemes. In designs such as Posters, Car Ads or Billboards in which brilliant coloring is generally desired, you will find that designs based on the Complementary Colors are generally the best.

Monochromatic Colors: A design known as Monochromatic is one in which the whole effect has been produced in varying tones of the same color. Sometimes in visiting an Art Gallery, you will see a landscape in which the whole picture has been painted in varying tones of green. Again it may be a portrait in which only brown has been used.

Monochromatic Color schemes are good to work out when first using color, as they will help you to master the idea of tones and values more easily.

Warm and Cold Colors: In studying colors we find that they may be either warm or cold in quality. By this we mean the optical effect which colors have on the observer.

We find that the coldest color is Blue, and its complement Orange is the warmest color. In Complementary Color schemes you will find that the colors naturally adjust themselves. If a Primary Color is warm, its Complement is cold and vice versa.

Blue, Green and Violet are known as cold hues. Red, Orange and Yellow are called warm hues.

Colors in Interiors: This idea of warm and cold colors should be always kept in mind in all color work. For instance, we would avoid using a predominance of reds and yellows in the furnishing of a room which receives a large amount of sunlight.

On the other hand, a room in the house which receives but little sunlight can be made cheerful by the use of warm luminous colors such as Yellows, Tan and soft Red.

In using colors in Advertising or Illustrating we should plan them so as to obtain the best results possible from the colors we may be using.

Yellow: Scientists in experiments have found Yellow to be the most luminous of all colors. In other words it is twelve times as strong as Violet, for instance, in carrying light. Yellow is a color which is found to be very effective in Billboard and Outdoor Advertising because of its carrying quality.

A strong, attractive Poster can be worked up by the use of two simple colors such as Yellow and Black or Yellow and a Deep Blue.

Red: While Yellow has a great carrying quality, Red has a much more powerful effect upon the eye. It arouses the optic nerve and stimulates. In some cases it excites the temper. When people are angry we often say that "they see Red."

Red also has the optical effect of bringing an object closer to the eye. Rooms tinted in Red appear smaller than those tinted in Blue or Gray.

Red is valuable in some cases where the designer wishes to attract the eye, or to give some fire and life to his work. It should never be used in unimportant parts of the picture.

Blue: Blue is just the opposite of Red. Where Red appears to bring things closer, Blue seems to carry them away from the eye. Blue is a cool, formal color and is used a great deal to offset the effects of Red and Yellow.

Blue can often be used with good effect in cases where a design seems to have too many warm and luminous colors. Pure Blue and Crimson Red should never be used next to each other in large areas as they are so different in nature that the contrast is too violent.

Green is obtained by mixing Yellow and Blue. As Yellow is light and cheerful and Blue is cool and restful, we find in Green a cool, restful color. That is why Green is used so much in carpets, tapestries, etc., and why the eye is rested by large areas of green hills or trees.

Green: In mixing Yellow and Blue to obtain Green, if we have a predominance of Yellow in the Green, we call it a Warm Green, because Yellow is a warm color. If we give Blue the predominance we call it a Cold Green, because Blue is a cool color.

Orange: Orange is a warm, luminous color because it combines the glow of Yellow with the fire of Red. That is why Orange is a good firelight color.

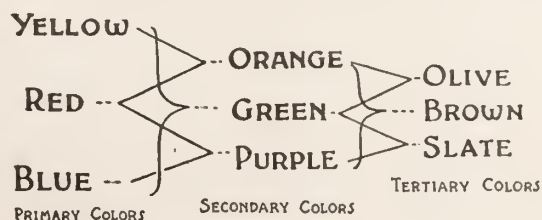
Artists in making a water color picture, put a transparent wash of Orange over it if it seems too cold in color.

Orange is a splendid Poster color and can be used successfully with deep blues, greens, browns, and black.

Violet: Violet is the deepest of the Secondary colors. The effect of mixing the two opposite qualities of fire in Red and coldness in Blue gives a sombre, rich hue, next in relation to Black.

Violet is very good in places where a deep, rich effect is desired or a cast shadow in a Poster design.

Analyzing Colors: We might continue on through any of the remaining colors of our Chart and figure them out in the same way. But having the qualities of the Primary and Secondary Colors in mind, you can obtain the characteristics of a Color by finding out on what Color it is based. For instance, we find Brown to be a warm tone because it contains the warmth of Orange and the richness of Violet.



The accompanying diagram will explain this idea.

In the circle on Plate B you will notice that there are four rings of Colors. The first ring contains the Primaries, the next the Secondaries, and the third and fourth are known as Tertiary and Quaternary colors. The farther out these rings are from the center the softer they become.

Interior Decorators: Charts of this kind are used a great deal by Interior Decorators in obtaining room harmonies. As shown in the pen sketches, any of the combinations such as Red, Orange, Brown and Buff produce an Analogous Harmony.

The colors directly opposite each other can be used to produce Complementary Harmonies. For instance, if we use Yellow, Orange, Blue and Buff, then we can use as their complementaries Blue, Violet Slate and Plum.

In this way we have a Chart of Color Schemes which works automatically. We must remember in these schemes, that it is not necessary to use the pure color. It may be grayed color, or one which is a light tint of the desired hue.

To use pure colors constantly, spoils the color sense until people lose their susceptibility to the pure colors when used in a good manner.

The Best Color Schemes: In applying Color Harmonies, remember that designs which are made of colors based on Red, Yellow and Blue in some form are better than those in which one of the primaries has been left out.

A color scheme may contain only Tan, Brown and Blue but it would be good because in Tan we find Yellow, in Brown we find some of Red, Blue and Yellow, and in the Blue we have the complete set.

Proportion of Colors: As Red and Yellow are both warm colors, you will find that it is necessary to use about as much Blue as the combined amount of Red and Yellow in a design. A proportion of 3-16 Yellow, 5-16 Red and 8-16 Blue gives a good harmony.

In designs in which Gold is to be used, too much Yellow should not be introduced. The Arabians often used Gold in the place of Yellow in their designs. While Gold is richer than Yellow, it has a similiar effect when used in a design.

In planning any work in color, it is always best to try to obtain

good effects with few colors. Designs of this kind are the most practical, as they are less expensive to reproduce and have printed.

Pure Colors: In choosing your color scheme remember that color is a force. The more brilliant a color the less area it should be given. If the color you select is a soft neutral tone, then it may be used over large areas without fear of producing a poor balance.

The purest colors should be used in points which you wish most to emphasize.

There are various kinds of colors that may be used in modern designing. To many artists, the laying on of smooth flat washes of transparent color is difficult. Also in working with transparent colors, it is necessary to sketch around the highlights in order to leave them light enough in the finished drawing.

Tempera Colors: It is for this reason that most modern designers have adopted what are known as Tempera Colors. These Tempera Colors are opaque in quality and can be used like Oil Paints. These colors lie flat and smooth and are good for covering large areas.

Opaque Colors should be laid on thick with a fairly large brush. Using too much water with the colors never produces the best results.

Another advantage of Opaque Colors lies in the fact that light or dark colors may be painted over one another with good effect. In this way a highlight may be put right over a medium or a dark tone without any trouble.

There are various good makes of Tempera Colors, some of which are noted in the back of the book. A fair substitute for a Tempera Color can be made by mixing "Temperine" or Chinese White with any of the Transparent Colors. This makes them opaque, and they can be then used as Tempera Colors.

In selecting a subject for your first Color work, choose one which is simple but practical. In using the various Colors such as Browns, Reds, Greens, etc., remember that there are many variations of these hues. A design which would look well in a Brown of a greenish tinge, such as a Vandyke Brown, might not look as well if a Red Brown were used instead.

These little differences of hue, value, and intensity become more apparent as you work with your colors.

Problems.

Take the sketches which you made for the chapter on Design and work them out in color.

1. In the Naturalistic Design, color the sketch in the natural colors of the original. If, for instance, you have sketched Holly Berries and Leaves, use the Vermilion Red in the berries and the Deep Green in the leaves.

2. In the Conventional Design, use a combination of Analogous Colors, irrespective of their resemblance to the natural colors of the original. For instance, in this design, a combination of colors such as Blue-green, Blue, and Violet may be used, or Buff, Orange and Brown.

3. In the Geometric Design, use a combination of Complementary Colors, such as Yellow, Violet and Plum, or Red, Orange, Deep Green and Slate.

Try to distribute the colors in your designs so that they will make a good color balance. Put the most brilliant colors in the most important parts.

4. After you have done this, then try sketching some simple object from Nature in colors, such as a Butterfly, or a Rose. With this sketch as a motif work up a Conventional Border to go around the frieze of a room. When you have pencilled this to your satisfaction, then finish it in colors, using the same colors which you used in sketching the subject.

In this way, if you have sketched a Butterfly which has Orange and Red spots and Brown wings, your Border sketch would show a conventionalized Butterfly motif worked up in Red, Brown and Orange.

This study will develop your ability to adapt your art knowledge to practical purposes.

It is much better to study Color in this way first, as working from complex subjects such as landscapes or figures generally causes confusion.

Suggestions:—1. Make a color sketch of some bird such as a Robin or an Oriole. This sketch should be at least 5 inches long. Next design a border 3 inches deep and 10 inches long, using the bird as a repeated motif. This border should also be in colors.

2. Sketch in colors some flowers, as a Rose or a Tulip. Make these life size. Design a border 2 inches deep and 8 inches long to go around the top of a vase.

3. Design a Monogram for yourself inside a 2-inch square or circle. Use your initials and any three colors such as Red, Gold and Black.

4. Make a Poster Landscape about 5x7 inches, using simple flat tones. Do not attempt to show modeling and make it in not more than four colors.

All of these designs should be worked on watercolor paper. Care should be taken not to roughen the surface of the paper too much in sketching your outlines as this spoils the surface for watercolor work.

Either Transparent or Opaque Colors may be used.

Chapter XX

POSTERS AND POSTER STAMPS

ONE of the most interesting phases of Art work is that of designing Posters. Posters in some form or another have been in use almost since the first artist started to wield his brush.

It is natural for men to see the advantages of combining any message they wish to convey with some form of illustration or design to make it more attractive. The old Egyptian inscriptions or "story pictures," as they are sometimes called were really Posters in one sense of the word.

Value of Posters: Of recent years the popularity of Posters and Poster Stamps has increased remarkably. This is largely due to the fact that advertisers find that Posters combining artistic merit and good selling points form one of the best mediums for reaching the public.

A great many forms of advertising come under the name of Poster. A billboard, a window card, car "ad" or magazine page might all be designed from the poster standpoint.

Their Definition: The name Poster might be said to apply specifically to those forms of art work which combine a well proportioned design with all of the subjects treated in an absolutely decorative manner. Designs containing naturalistic forms and modelling are not Posters.

To many artists, a Poster means nothing more than an assembly of the necessary wording, illustration and color. It is this general attitude that is responsible for so many of the poor drawings we hear called Posters.

Elements of A Good Poster : Most Posters must be considered from two standpoints. From the artistic side a successful Poster must be well balanced and pleasing in its design. Its Color should be in harmony with the main idea of the Poster.

From the advertiser's view, the Poster should tell its own story quickly, effectively, and also leave a pleasant impression.

Often we find Posters which are artistic, but in no way related to the story they are supposed to tell. Or perhaps we find a Poster

which has become so commercial as to crowd out all art by its overabundance of uninteresting reading matter.

Rules For Posters: Three good rules to remember in Poster designing are as follows:

1. The design should be simple.
2. It should have unity of wording and illustration.
3. It should tell its message effectively.

These three rules cover a great deal of material. The first one of simplicity is easily understood when we realize that posters are generally designed to be read at a glance, and often at quite a distance.

Then if we plan on a design which illustrates our idea in a simple manner the eye grasps the picture quickly and without too much effort.

Simplicity: To produce simplicity, a poster design must never contain details unnecessary to its structure. The tendency in first designing posters is to put in a great deal more than is needed. Fancy ornaments or embellishments unrelated to the main idea only kill that much of its effectiveness.

Flat Tones: When a poster does not please you, try the idea of eliminating parts of it rather than adding more, and you will find the design is generally improved. The tones used should be broad and flat. The design itself should be planned so that its lines and areas will be pleasing to the eye, even if executed in black and white only.

Our foremost artists have mastered the idea of simplicity in Posters. In most of their designs we find the illustration cut down to the fiber. Whole figures are shown in flat silhouette or intricate buildings in one flat plane. Only those parts absolutely necessary to the correct understanding of the figures and clothing should be put in.

This method has been found unusually satisfactory because of the fact that the eye takes for granted many of the details we often painstakingly introduce.

It is not necessary that we suggest, for instance, any more than the accompanying diagram for anyone to realize that it spells "circle."



The second rule of Unity is also quite necessary to successful posters. It includes the idea of Design without which no Poster is a success. How often we see Posters in which the lettering seems entirely foreign to the rest of the design, both in location and character.

Lettering In Posters: This is because the artist failed to think of his lettering as an integral part of his design. Good designers always consider the wording as an element which may be used to advantage in the "spotting" of their composition.

Miniature Sketches: There is no better way of obtaining Unity than by first planning your sketch in a miniature form, say 3x5 inches, or so. This helps to keep the design broad and simple. It also prevents the common failing of "scattering" the various parts of the design or of cutting it up into too many small areas.

One method of producing Unity is that of using a background of some harmonizing color, such as Blue Gray or a Deep Brown. This color, running in back of the whole poster, has the effect of "pulling" or uniting the various parts.

Borders: Another method which often helps is the use of a fairly wide border around the edge of the whole design. If the Color here is not so prominent as to detract, it will have the effect of carrying the eye from one section of the Poster to another.

Background Spaces: In planning your sketches, you will find that the shape of the areas left by the design against the background are just as important as the shape of the design itself.

The word effectiveness may be said to cover the whole poster idea. An effective poster should be simple and unified, but it must go much further than that. Advertisers are constantly complaining that artists submit designs which are very artistic, but good for nothing more. This is because many artists fail to catch the spirit of the subject. They fail to relate their illustrations so closely to the rest of the story that the two are inseparable.

Harmony of Illustration: Too often we find the wording telling one story and the illustration another, with most disappointing results. A poster advertising a Summer Beverage should not give us the impression that it is announcing Spring Fashions.

A good way to plan an effective Poster is to read the material connected with the design. Then select three words which you would use if you were to write an explanation of this subject.

For instance in the Poster on the working sheet called "Around the World" we might choose to describe the three words Cruise, World, Hamburg-American. These three words tell us what it is; where they are going, and who is giving it. The additional attraction of the Panama Canal, might also be played up strongly.

When you have analyzed any Poster Material in this way you will find it much easier to select the subjects necessary to explain its mission correctly. You can then select out of these subjects the one which you think the most important and interesting and use it as your main idea.

Good And Poor Lettering: The picture part of the Poster can often be used to tell a part of the story which otherwise would require wording. As a rule, the fewer words used, the better. Never, under any circumstances, use lettering which is not perfectly legible. People who glance at posters are not expected to decipher interlaced letters or ornate "ginger bread" effects. Letters of the strong block or so-called "poster" type are always to be preferred. Such a letter is shown in some of the alphabets in Plate 14 B.

Color: The importance of good Color should not be forgotten. We find in Color a force just as powerful as an electric shock or a siren horn. Color depresses or inspires people to a remarkable degree.

Artists who realize the psychological effect of color use it to much advantage. Such Colors as yellow, tan, buff and orange give life and cheerfulness. Reds and orange typify fire and enthusiasm. Greens and browns are restful and pleasant. Blues and blue-greens have a tendency to produce coolness and restraint in a color scheme.

A great deal might be said about color in posters, one idea being that the best posters allow for brilliant contrasts of color. Posters without this contrast lack life and vitality.

Contrasting Colors: For this reason you should work for such combinations as Deep Blue, Medium Gray and Orange, or a Violet Brown, Tan and Deep Yellow. By referring to the Color Circles in Plates 18 A and B you can select any complementary set of colors and use them to obtain contrast in your posters.

It is a good plan to try your Color scheme on the little 3x5 miniature sketch first, until you are satisfied. Then with this sketch as a guide you can proceed to "lay out" the finished design.

For instance if you are planning to make a Poster 12 x 20 inches in size then it will be just four times the size of your miniature sketch. Of course this miniature sketch should always be drawn in the same proportions as you wish to use on your large finished poster.

Enlarging The Poster: Pencil the design and lettering carefully on some fairly thick board such as Strathmore or Illustration Board. Do not select papers with a smooth shiny surface, as they will not take the color well.

Tempera Colors: Next purchase some opaque or "tempera" colors, as they are called, and with a flat brush lay on the various parts in absolutely flat tones. Do not try to obtain naturalistic modelled effects. This puts it out of the Poster class immediately.

Opaque colors are suggested because they will produce smooth effects on large areas. Also, one color can be painted over another as with oil paints. The colors should be put on thick and not mixed with too much water, as this will produce streaked effects.

Remember that the more brilliant colors you use the more blacks, grays or browns you will need to offset them. Never use pure combinations such as Red and Blue next to each other.

Balance of Colors: The amount of Blue or cool colors used in a design should be equivalent to the combined areas covered by the reds and yellows used in the same Poster. This gives a good Color Balance.

The colors used should suggest the spirit of the Poster. A January scene should be predominant with blues and greens rather than reds and yellows. It is also a good plan not to use too many colors, as this not only "cuts up" the simplicity of the design, but renders it impractical for reproduction.

Poster Stamps: Poster Stamps are really a miniature form of a Poster design. They allow for only the simplest kind of treatment, both in wording and design. It is a good test of any poster, no matter for what purpose it is intended, if it will look just as well reduced down to a Poster Stamp as it does in its large form.

Poster Stamps are generally designed in groups or series of twenty or thirty, which may be all printed at the same time on the printing press, and with the same color scheme. This reduces the cost of their production. The perforated edges are obtained by running the printed sheets through a perforating machine, which punches the holes for tearing the stamps apart.

Poster Stamps have been found a valuable advertising medium, being used on letterheads, envelopes, packages, calendars, blotters and in many other ways. They help to give an interesting touch to many otherwise unattractive bits of reading matter.

If the poster you design is the only one to be used then it is displayed direct, but if many others are to be made from it then it must be reproduced and printed. How this will be done, all depends on those who are having the work produced.

Reproducing Posters: In some cases your poster is sent to a Lithographing House where its various tones are reproduced on stone and printed on a Lithographic Press, or by the newer offset Process. These processes are generally quite expensive, but very satisfactory.

If the poster is large it is often made by tracing the various parts of your drawing on linoleum. This linoleum is then cut out and glued onto wood blocks for printing.

Oftentimes large posters are cut out of wood. This wood is printed on a press in a similiar manner to an engraving. Both of the above processes are much cheaper than producing the poster by Lithography or Photo Engraving.

Working Drawings: If the poster is not very large it is often reproduced by the Photo-Engraving process, explained in one of the previous chapters. If this method is used, you are generally required to make what is known as a Working Drawing, as shown on Plate 19. This drawing is done in pen and ink on any smooth-surfaced paper. As you will notice, it shows in outline all the various parts of your poster, even the decorative shades and shadows.

This outline drawing is photographed and several prints are made from it on metal. These prints in turn, are painted in with an acid-proof ink so as to print the various colors desired. In the yellow plate of the "Infallible Powder," for instance, the sky in back of the birds, parts of the water, and the lettering were painted solid so as to print



MODERN POSTER DESIGNS
showing
flat, simple treatment



Preliminary Pencil Sketch



METHOD OF WORKING OUT A POSTER
Finished Poster



Working Drawing for Reproduction



A fair design spoiled by poor
arrangement of lettering



Composition in which both figure
and lettering are too small for space



An arrangement combining both
good composition & strong lettering

a solid Yellow tone. The birds were in Black with medium Blue spots, so that a separate plate for each of these colors was also necessary.

This "painting in" of plates is generally done by the engraver, who uses your color sketch as a guide. But it is always a good plan to consult with the printer or engraver and find out whether he wishes a Working Drawing for reproduction.

Color Plates: It is good to remember that Poster Designing allows for a high form of art expression. Some of our best Commercial Designers specialize in this line, and it is a field which is always with us. It allows for good drawing, design, and plenty of color. In addition to that it develops the artist's ability to produce designs which are not only artistic, but practical as well.

Below are given some of the standard measurements used by artists when working out poster designs.

1. Good Poster proportions are 11x14, 14x20, 20x30 inches. These should run from 2 to 5 colors, seldom more.
2. Street Car Ads—Standard size, 11x21 inches. These should run in a horizontal direction and generally contain from 2 to 4 colors.
3. Billboards—Sketches made in a miniature form, generally to the scale of 1 inch equaling 1 foot. These sketches are used by the outside artists in producing the finished signs. 3 to 5 colors.
4. Poster Stamps—Vary in size, generally being $1\frac{1}{2}$ x2 inches, sometimes larger. 2 to 5 colors most common. Working drawings for these should be about 3 or 4 times the size desired in the finished stamps.

Problems.

As a problem plan for your Poster in some small size such as 8x11 or 11x14 inches. Look over the advertisements in any magazine or newspaper and see if you can plan up a poster which will be an improvement on the "ad" you select.

If possible, change the wording of the original "ad" to make it more effective. Eliminate all unnecessary details.

For practically every case you will find designs planned in large flat areas, and combining deep rich tones with brilliant small areas make good posters.

Study the designs shown on Plate 19 and notice how they have been first planned to make a pleasing balance. If you will study good Posters, Car Ads or Billboards that you see you will find that the colors used are also distributed over the design in such a way as to make a good color balance.

After you have tried designing a Window Poster, try a Car Advertisement, and then a Poster Stamp. All these attempts should be preceded by the making of a little miniature sketch for the general idea and proportions.

Suggestions for wording:

Posters—1. Paris Furs. 2. Colgate's Perfumes. 3. Seaside Chocolates—Ferry Candy Co. 4. Mother's Cookies, Healthy and Sweet. 5. Hotel Carmel—By the Sea.

Car Ads.—1. Uneeda Biscuit. 2. Bakers Cocoa, For all the Family.

3. Rose Bloom Apples—From Mountain Valleys.

Bill Boards—1. Downey's—The Cafe of Merit. 2. Try Drinkit—The Nation's Summer Beverage. 3. The White Flyer—The Ideal in Motor Cars.

Poster Stamps—1. Willards Candies. 2. Arrow Collars, 2 for 25c. 3. Yosemite Valley—Nature's Garden Spot.

Chapter XXI

PROFESSIONAL "SHORT CUTS."

IN the modern world where time is such a factor we find that artists are on the lookout for any ideas which will help them produce good work in a minimum amount of time.

There are artists of the old school who sometimes scoff at the idea of anyone's resorting to mechanical devices to produce artistic results. This attitude is rapidly disappearing, as it has been demonstrated too many times that the progressive artists are the successful ones.

In this chapter are given some of the ideas and so-called "short cuts" which are used every day by successful Commercial Artists and Designers.

Checker Board Drawings: First we have the Checkerboard method of enlarging drawings. This consists of taking the sketch you wish to enlarge and cutting it up into squares with light pencil lines. Next take the space you wish to fill with your enlarged copy, and cut it up into the same number of squares.

In this way you can look at each square separately and check up just how much of the picture comes inside of it, and put that much into your enlarged drawing. This method helps you to retain correct proportions. (See Plate 20).

The Pantagraph: Another method of enlarging sketches is by the use of the Pantagraph. One of these is shown in the Working Plate.

It consists of four light wood strips, so fastened together that if the sketch you wish to enlarge is thumbtacked under the brass point marked B, the pencil C will register on your paper an enlarged copy of the original.

The size of the enlargement is regulated by a series of holes punched into the wood strips. These holes are numbered and the brass screws fastened into the desired number. You must always be careful to

have the screws in the same number on each of the various strips of wood, or a distorted enlargement will result.

When you wish to reduce a drawing with the Pantagraph, this can be done by reversing the pencil and metal points. The metal point is then run over the outlines of your original and the pencil point registers a reduced copy of it.

Fair Pantagraphs can be purchased at art stores for a small amount.

Enlarging Sketches: One problem which often confuses artists is that of enlarging a sketch to correct proportions without wasting time to figure it out mathematically. The figure in the lower right hand corner of Plate 20 will help to explain a good method.

First thumb tack your drawing paper onto your board so that its edges are parallel with your T square. Then measure off the length and width of your original sketch and mark these measurements off from point A. Finish out the rectangle as shown by dotted lines.

Next lay a ruler on point A, and its other end on point C, and continue this line indefinitely.

Now if you will take your T square and slide it up and down along your drawing board, any point where it touches this line AC will give you the upper right hand corner of the space you desire.

This may sound a little difficult, but trying it once will help you to see in what a short time you can enlarge a rectangle to any size you may desire.

Ellipses and Circles: The making of good ellipses also is difficult. A quick way of producing a good one is as follows:

First find the length and width of the ellipse you desire to draw. Next draw a pin into the points marked A and B and one at point C, in the figure on Plate 20.

Take a strong thread and tie it so that it fits tightly around these three pins, forming a triangular shape. When this has been tied tightly remove the pin at point C, leaving the thread around the other two pins.

Now if a pencil is placed inside this tied thread and run around in a circular direction, its point will describe the desired ellipse.

Sometimes an artist has no compass handy and desires to draw a circle. If you will take a strip of cardboard and thumbtack it down at one end, a pencil inserted into the middle of the other end will des-

cribe a good circle. The size of the circle naturally depends on the point at which the pencil is held.

Another short cut, but one often overlooked, is that of transferring measurements from one drawing to another. Often artists will first measure with a ruler and in turn transfer these measurements to their drawing.

A quicker way is to take a strip of paper which has a straight edge and lay it down on the original sketch, marking off on the paper the necessary points. This paper can then be laid onto your drawing and the points quickly transferred.

Quick Ways To Trace: For tracing a drawing there are several methods. If the sketch to be traced is on fairly thin paper, then a sheet of what is known as Graphite paper can be laid under this. The original is then traced off with a hard pencil or an Agate pointed Tracing Needle.

Never use Carbon Paper for tracing as it is practically impossible to remove the indelible lines, and it also tends to repel water color.

If Graphite Paper is not handy the back of the sketch can be rubbed with a large soft pencil and traced off as above.

If the sketch to be transferred is on thick paper then it is necessary to trace this off first with a transparent tracing paper, this tracing in turn is laid over Graphite Paper and transferred.

Burnishing Method: Sometimes in making a bi-symmetric design time can be saved by drawing only one-half the design. This half is then folded over and rubbed onto the blank half of the paper. The rubbing can be done with a knife or spoon handle, and gives enough detail to help you to obtain the correct lines.

Most errors in pen and ink drawings are corrected with Chinese White. If, however, you wish to scratch out a line, it should be done with a sharp knife or a Safety Razor Blade.

After the ink has been loosened in this way, then an ink eraser can be used to remove any little marks.

Re-Drawing Lines: If you wish to re-draw the line, the surface of the paper should be first smoothed down with a knife handle or any round surface. After this a pencil coating should be put over the surface with any soft pencil. This will prevent the ink lines you put on from spreading.

After the ink is dry, the pencil can be removed with a soft eraser.

Black Over Chinese White: Any black lines put over Chinese White corrections should always be done with Lamp Black on a water color brush. Lines done with Drawing Ink over Chinese White have a tendency to crack off.

Sometimes Commercial designers receive orders for drawings which require a great deal of detail. This is generally true if the order is for a pen and ink drawing of a building. Sometimes it may be a drawing of a Room Interior or a sketch of some Textile with an intricate pattern.

Silver Prints: In cases of this kind the artist often finds it cheaper and more satisfactory to use what is called a Silver Print. These are made as follows:

Suppose the order was for a Building Exterior. A photograph of the building is made and a print made from the negative onto any plain photographic paper which has a dull finish. This print is used by the artist as a guide, and he draws over the photograph in waterproof ink. This drawing is made after the manner of any regular pen and ink drawing.

Bleaching Photos: After the ink is dry, the photograph is bleached out with diluted cyanide of potassium. This cyanide may be put in a tray or rubbed over the photo with cotton. This removes the photographic image, leaving only the pen and ink lines. The hands should be washed well after using the cyanide, as it is a poison.

After bleaching, the photograph should be washed thoroughly in in water and left to dry. After drying it can be mounted on cardboard.

This method will be found very practical and enables anyone to produce good drawings from subjects having elaborate details. The bleaching out may be done for you by any Commercial Photographer or Photo Engraver.

Bromide Enlargements: Another method similar to this is that of working over Bromide Enlargements. If for instance you were commissioned to make a color sketch from the lobby of some Hotel you would find it a lengthy task to sketch out all its details in correct perspective.

A better way is to take or have taken a fairly clear photograph



ORIGINAL PICTURE

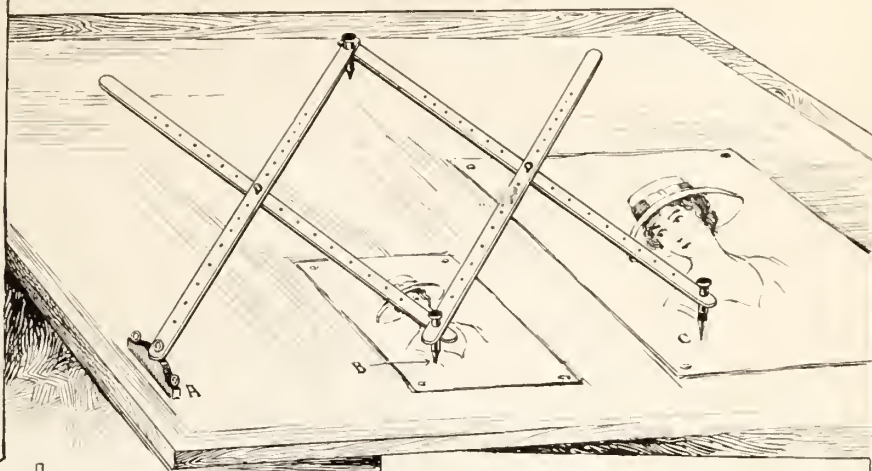


ARTIST'S ENLARGEMENT

Showing the
Checkerboard
Method of
Enlarging Sketches

THE PANTAGRAPH

Fastened to the Drawing Board at point A Both original picture and enlargement are thumbtacked to board also.

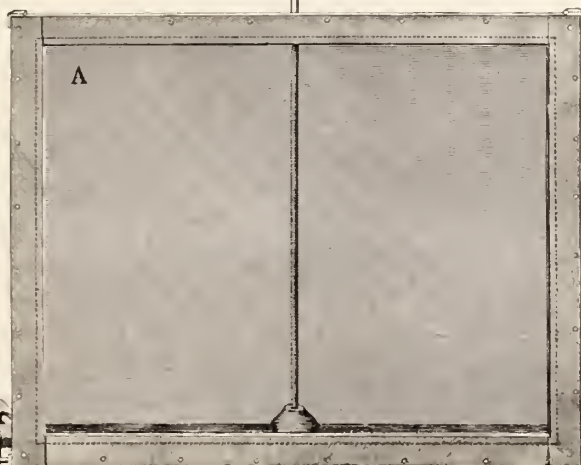


Showing how
the
SHADING MACHINE
is used

Film marked A is
transparent even
after ink is rolled
onto its surface

Drawings or Plates
are fastened on the
board at B and ink
is rubbed onto them

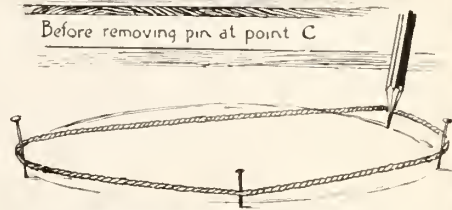
Screws for adjust-
ing films are found
at C



THE SUNSET NURSERY
HIGH GRADE FLORISTS



Before removing pin at point C

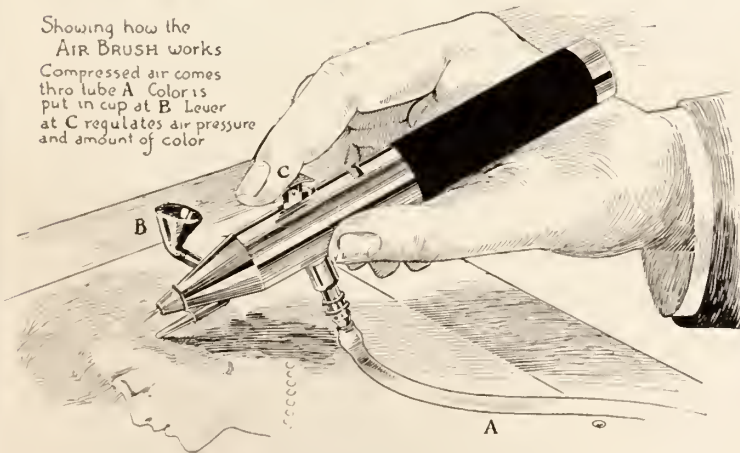


After pin at C is removed

Drawing an ELLIPSE
with a String and Pins

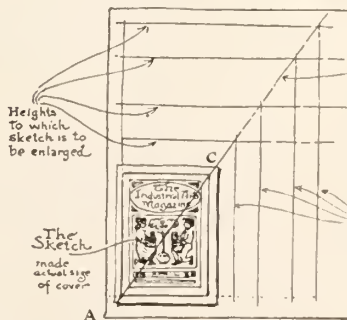
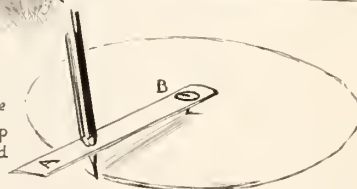
Showing how the
AIR BRUSH works

Compressed air comes
thro tube A. Color is
put in cup at B. Lever
at C regulates air pressure
and amount of color



THE AIR BRUSH

Quick way of
making a Circle
Cardboard strip
A thumbtacked
at B



An oblique
line passing
thro corners
of the sketch
intersect the
horizontal line
of height.
From these
points, per-
pendiculars
are drawn down,
giving the
proportionate
enlargement
of the sketch
space

Correct method of Enlarging sketch to any Size

of the hotel lobby. From this any photographer will make a Bromide Enlargement the size you desire.

This Bromide gives you most of the details, such as location of writing desks, windows, frieze patterns, etc. Over this you can paint in Tempera Watercolors the color sketch required, without delay in planning out the room arrangement. This method is used extensively in drawings having a great deal of detail.

Retouching Photos: One of the most active phases of Commercial Designing is that of retouching photographs. In the majority of cases photographs made of jewelry, machinery, furniture or fabrics must first be sharpened up in detail before they will reproduce satisfactorily.

Oftentimes this retouching amounts to nearly as much work as making a new drawing. There are cases, however, where this cannot be avoided, such as where an unsightly telegraph pole comes in front of an office building, etc.

Various Photo Colors: The class of prints generally most satisfactory for half tone reproduction are those known as Glossy Velox. These photograph better than the Sepia toned prints, as the Sepia color has a tendency to lose the details in the darkest portions of the photo.

For retouching, however, any of the photographs with a dull or "mat" finish are much easier to work over with brush and colors. If, however, you should have a glossy photograph to retouch, there are various ways which its surface may be prepared so as to take the color readily.

Smooth Photos: One is that of rubbing over the surface of the photo a little liquid Ox Gall with a piece of cotton. Another way is to rub well over the photo a little Electro-Silicon such as used for cleaning silver. This gives the surface a slight tooth which retains the color. After the photo has been retouched, this powder can be dusted off.

If no Silicon or Ox Gall is handy, a little common Face Powder rubbed over the photograph will answer the purpose nearly as well.

In retouching photographs, always determine the general tone of the whole print; and try to match this color in retouching. You will find that some photos have a purple-brown tinge, some a green-brown, and some quite a red-brown cast.

It is always best to paint out with a medium tone wash any parts not desired and then over this to put the darks and highlights. The colors used should be mainly opaque.

The Air Brush: In connection with the retouching of photographs we have an appliance known as the Air Brush. These Air Brushes are pencil shaped instruments through which color is sprayed by compressed air.

The amount of color used is regulated by the pressure of the index finger on a little lever at the top of the Air Brush. Fairly fine lines may be obtained as well as a wide broad spray of color.

Any hue may be obtained by mixing the desired color into a little cup which is attached to one side of the Air Brush.

As the mechanism of the Air Brush is intricate, specially prepared colors are generally used through it, as cheap coarse colors tend to clog it up.

Paper Masks: Surfaces you do not wish to spray with the Air Brush are generally covered up with a tissue paper mask. Small details are often painted over with a little rubber varnish. This rubber film can be easily rubbed off with the finger tip after the air brushing has been done.

Practically all Commercial Art shops use the Air Brush, as it is indispensable in producing smooth flat tones for skies, streets, or backgrounds.

Reducing Glass: These suggestions would not be complete without making reference to the ever handy Reducing Glass. This glass has a concave surface, so that objects viewed through it look smaller than in reality. Artists use these constantly in obtaining an idea of how their drawings will look when reduced and printed.

They are also handy for Commercial Designers who wish to show a client how their drawings will look when reproduced smaller. Such glasses often disclose faults in color or composition which are not apparent on the large drawing.

The ideas given above have all been given from practical experience and are worth trying. Most of them will be found very useful if you wish to apply your art knowledge in a practical manner. There is no better way of obtaining real satisfaction than by being able to do this, since:

“He who hears about a thing remembers but little of it; he who sees it done, remembers more; and he who does it himself remembers all.”

Chapter XXII

A LIST OF WORKING MATERIALS

AIR BRUSH—A mechanical device for spraying color. Various makes: Thayer & Chandler, Wold, Pasche. Pumps and compressed air tanks are made to go with these.

AIR BRUSH COLORS—These are tube colors, especially made to use in Air Brushes, are smoothly ground so as not to clog the mechanism of the Air Brushes. Colors most generally used: Sepia and Lamp Black.

SHADING MACHINES—These are devices for transferring patterns to paper or metal. Used by artists and engravers to obtain tones in color work. There are two kinds on the market, the Ben Day Shading Machine and the American Shading Machine.

The Ben Day outfit is sold subject to a lease.

The American Shading Machines are sold outright. Both are equipped with a set of films of various patterns and rollers, inks, etc. Books showing patterns can be obtained from the manufacturers.

SHADING MACHINE INKS—Inks, rollers, etc., are designed especially for use in the Shading Machines. Inks are mixed with turpentine when used and give a jet black line or dot.

BRUSHES—The best brushes for general work are as follows:

No. 3—Pointed Red Sable for fine details.

No. 5—Pointed Red Sable for medium work.

No. 8—Pointed Red Sable for flat washes and large areas.

No. 8—Wedged Shaped Riggers or Bissells for lettering.

No. 7—Rubens Artists Bristol for Poster Work.

Good makes are Prang's, Rubens', and Rigger's.

These brushes are made with Water Colors. Oil brushes may be obtained from any art store.

Brushes should always be carefully washed in water after using.

BURNISHER—A metal pointed instrument for obtaining a smooth surface by polishing. It may be used to smooth down paper where errors have been scratched out. Generally used for transferring designs by rubbing the paper on the reverse side. See Plate 12.

COLORS—Transparent Water Colors are used a great deal in Commercial Designing. A complete set of good colors and a box costs from \$3.00 to \$10.00. Good makes of colors are Winsor and Newton's, Prang's and Talens.

A list of good colors is given below.

Gamboge	Burnt Sienna	Cobalt Blue
Yellow Ochre	Raw Umber	Prussian Blue
Chrome Orange	Vandyke Brown	Emerald Green
Vermilion	Paynes Gray	Hookers Green No. 2
Crimson Lake	Ivory Black	Sap Green
Indian Red	Chinese White	Mauve

This set of 18 colors gives a fairly wide range. If it is not possible to obtain colors of the exact name given try to obtain those of similar shade.

Cheaper sets ranging from 35c to \$1.00 can be obtained in most art stores. These colors are satisfactory for experimental and practice work.

TEMPERA COLORS—A name applied to opaque colors. Tempera Colors are becoming more popular each year, as they permit of smooth flat tones and allow for placing a light color over a dark one, which is impossible in transparent colors. Prang's "Liquid Tempera" in two ounce glass jars is widely used.

SHOW CARD COLORS—Are used in designing window posters. They are made so as to work well in rapid brush strokes. They contain more size than any other watercolors and this helps to give firm even edges to the brush lines.

A good set of colors consist of Red, Yellow, Blue, White and Black. Other colors may be added. Prang's "Liquid Tempera Colors" are excellent "Show Card Colors."

CHINESE WHITE—An opaque color used extensively in Commercial Designing. It is used to correct errors on pen and ink drawings. It is also used in illustrations and photographing retouching.

An important requirement of Chinese White is that it must photograph white when reproduced. Because of the ingredients with which some whites are made they photograph either white or darker than they appear on the drawing.

Various makes such as Prang's, Semples, Disk's, Holmes and Talens are all used by artists. The kind selected depends on the individual taste.

CHARCOAL AND CHAMOIS—The charcoal sticks are used by art students and illustrators in making black and white drawings. French charcoal is generally the best. Charcoal permits of rapid results. It may be blended or partly erased by using the tip of the finger or a piece of chamois. Pure whites may be picked out of the darks by using a kneaded eraser.

These drawings are generally made on a large sheet of charcoal paper and are kept from rubbing when finished by a spray of fixatif.

COMPASS SETS are used especially in Mechanical Drawing. They are also necessary in Commercial work. The average sets consist of the following:

Compass—for obtaining circles.

Dividers—for marking off distances.

Ruling Pen—for ruling straight lines in ink.

Bow Pen—for inking small circles.

Lengthening Bar—added to the compass so as to obtain unusually large circles. The Ruling Pen is used most. Both this pen and those attached to other parts of the compass sets should be filled with ink from the quill attached to the top of the drawing ink bottle. Always keep the outside of the pen clean as any ink there will run down and blot the drawing. Never carry too much ink in the pens, as this causes blots and heavy lines.

DESK—Besides the desk mentioned in the first chapter another good make is the collapsible style used by many artists. These can be folded and put to one side when not in use and can be adjusted to various heights and angles.

DRAWING BOARDS—Should always be of a three-ply wood. This means that it has a series of three layers of wood running in opposite directions. This prevents the wood from warping. A convenient size is 18x24 inches.

ERASERS—The erasers most used are the soft ones. Soft erasers do not spoil the surface of the paper or weaken the ink lines in pen and ink drawings.

Good erasers are those similar to Hardmuths Circle H eraser, Johann Fabers J. F. brand, and Venus erasers.

For places where heavy lines or mistakes need to be corrected an eraser of a closer grain is needed. Any art store can furnish these.

FIXATIF—A preparation of Alcohol and White Shellac. This is used to spray over charcoal or pencil drawings to keep the lines from rubbing off.

A metal Blower or Atomizer is used to spray the Fixatif. Never hold the Atomizer too close to the drawing as this will weaken the tones of the drawing. See Plate 16.

GOLD—Gold water color is often used in making sketches or illuminations. There are various shades, a Green Gold, Deep Bronze Gold and Pale Gold.

The gold which comes in small pans will adhere better to the drawing if mixed with a little photo paste. If mixed with mucilage it has a tendency to turn black in time.

Powdered Gold may also be used. This is mixed with powdered Gum Arabic which has been diluted in water. Enough of the Gum Arabic and water is used to mix the gold into a thin paste.

Powdered Gold is also mixed with Banana Oil. This is used when painting on wood or metal, but has a tendency to stain if used on paper.

GUM ARABIC—A white powder which is mixed with water. It is used as explained above, and also in the chapter on Pen and Ink Work.

Gum Arabic is transparent and can be painted onto paper and washed off without spoiling the surface of the drawing. It is used in making plates and drawings when Ben Day is to be placed on them.

Gum Arabic may be purchased at any drug store.

INK—Good ink is important. Prang Waterproof Black is recommended.

The quill in the top of the bottle is used for filling Ruling Pens. Inks should be kept covered or they will become too thick to run smoothly from the pens.

MOUNT BOARDS or card boards are used for mounting drawings which need a stiff backing. Boards in deep greens, browns, and grays may be purchased at any art store. In mounting drawings on them it is always best to start from the center of the drawing which is being pasted, and press outward toward the edges. This will help the drawing to remain flat on the mount when dry.

PANTAGRAPH—A wooden instrument shown in Plate 20. This is used for enlarging drawings. By adjusting the screws it may be set to enlarge sketches all the way from $1\frac{1}{2}$ to 8 times their original size.

They are used by Commercial Designers in obtaining the general proportions from sketches they have made. This saves considerable time in producing the completed drawings.

PAPERS—A good brand of drawing paper is necessary to successful results. For general Pen and Ink work a paper with a smooth surface is best. This may be either a glossy finish or a mat or dull finished surface. "Tuscan" drawing papers may be had in either buff or white and in many sizes.

For Water Color work the various ideas of dull finished papers and boards are best. Water Color will not take readily to glossy surfaces.

For Pencil or Charcoal, papers with a slightly roughened surface are good. These help to retain the crisp quality of pencil and crayon.

Tracing papers are also made that are transparent and have a good firm surface which will take either pencil or ink. These papers are used in transferring conventional designs, borders, etc.

Graphite papers are made for placing under drawings or sketches you wish to transfer. These graphite papers are better than carbon paper as they do not repel the ink or watercolor.

PENCILS—An artist has use for about three grades of pencils—

For general work—HB or medium hard lead.

For fine details—H or a hard firm lead.

For sketching—BB or a soft lead.

The medium pencil is most practical. The hard pencil is used in mechanical drawings and those having small details.

The soft lead pencils are good when making sketches which are to be finished in watercolors. The soft pencil strokes can be easily erased without roughening the surface of the paper.

In all work which is to be finished in pen and ink or watercolors the pencil should never be drawn so hard as to make it difficult to erase the lines afterward.

Good makes of pencils are those similar to Fabers, Dixons, American Pencil Co., and Eagle Pencil Co.

PEN HOLDERS—The best kinds are those similiar to ordinary writing pen holders. The small delicate pen holders have been found impractical as they cramp the hand. Holders having a rubber base for the fingers are best as they help to give free strokes in your work.

POSTER BOARD—A stiff cardboard made in various textures and colors. Used by artists in designing posters and window cards. Generally one side of the card only is coated with the colored paper, so as to save expense.

Boards with the surface known as Mat finish are best as they take the color well. Tempera or opaque colors are nearly always used on these.

REDUCING GLASS—A glass with a convex surface. Drawings or objects seen through it appear smaller than they are in reality. They are useful in obtaining an idea how a drawing will look when reduced to a smaller size. A good reducing glass costs about \$2.00 or \$2.50.

ROSS BOARDS—Some times called Scratch Boards. They are a patented paper marked with mechanical lines, dots and patterns. By rubbing a soft pencil over them deep shades are obtained, and by seraping them with a sharp knife lighter tones are obtained.

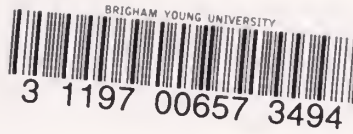
A sample of work done on this paper is shown in Plate 15.

Ross Boards cost about 50c a sheet and should always be handled carefully as they crack easily.

T-SQUARE—Used to rule horizontal lines. The cross bar of the square is held close to the left hand side of the board and slid over the paper to obtain parallel lines. The best T-Squares have transparent celluloid edges.

TRIANGLES—Are placed along the edge of the T-Square to obtain verticial lines. Both the T-Square and triangles insure perfectly square drawings, which is necessary in commercial Designing.

The best triangles are made of celluloid.



DATE DUE

APR 21 1982	APR 04 1997		
AUG 27 1982			
AUG 18 1982			
DEC 18 1982			
NOV 18 1982			
DEC 21 1983			
AUG 15 1986			
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